store front details

PITTSBURGH PLATE GLASS COMPANY

To obtain additional information on the store front details in this book, please contact:

PITTSBURGH PLATE GLASS COMPANY
3650 Market St.
St. Louis 10, Mo.
Phone OLive 2-1212

MR. EDWARD PRINZ
Architectural Representative
and
MR. HERBERT E. PARSONS JR.
Pittco Store Front Metal
Special Representative

No. 402

Issued 1954

FOREWORD

This book has been prepared for your convenience. It is our hope that it will prove helpful to you in detailing store front construction jobs.

The book contains details of all the products you normally include in a store front design. An earnest attempt has been made to present the details as compactly, concisely and clearly as possible.

Naturally, in producing a concise working manual of this type, it is impossible to include all descriptive and technical information about Pittsburgh Store Front Products. Should you desire additional information on any Pittsburgh product we urge you to contact our representative.

This book of details will be kept up-to-date. Additions, changes or deletions will be promptly submitted to you as they occur.

We shall welcome any comments you care to make about the book or its contents.

Elmer A. Lundberg, A.I.A.
Director, *Architectural Development*

Pittco STORE FRONT METAL

SECTION A-1 SASH, HEADS, JAMBS, SILLS

SECTION A-2 BARS

SECTION A-3 TWINDOW

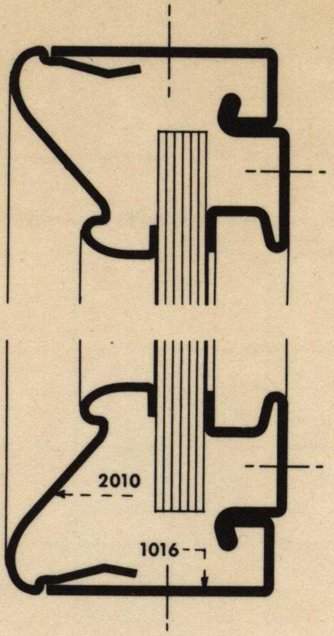
SECTION A-4 FACING MOULDINGS

SECTION A-5 TRIM MOULDINGS

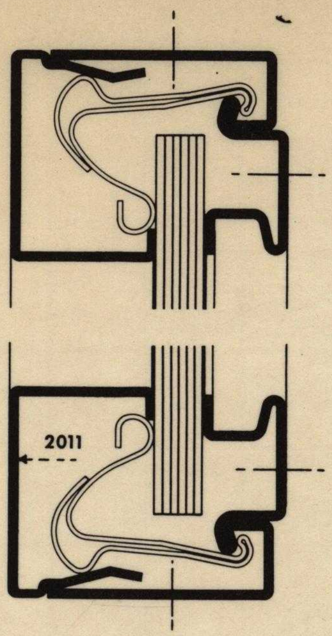
SECTION A-6 DOOR FRAMES

SECTION A-7 AWNING BARS

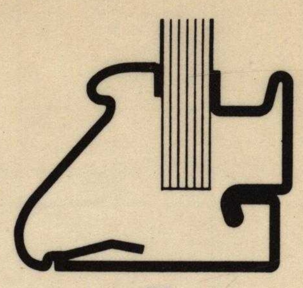
SECTION A-8 SHOW CASE AND POSTER CASES



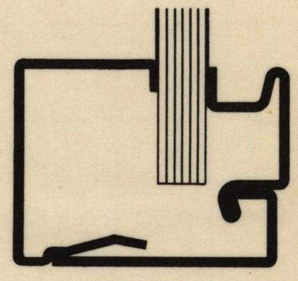
70



70-A

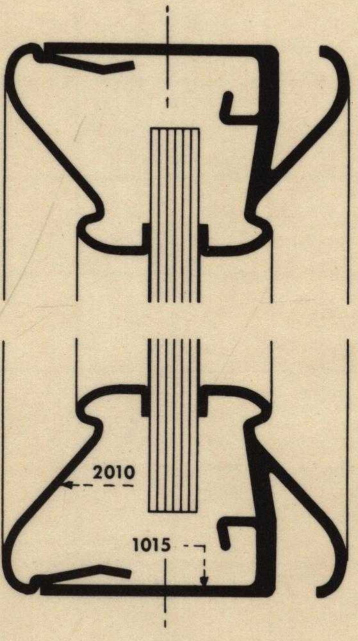


71
Self-Supporting Sash



71-A
Self-Supporting Sash

Self-supporting sash above are used without backing. Holes are omitted on back side and all exposed surfaces finished.



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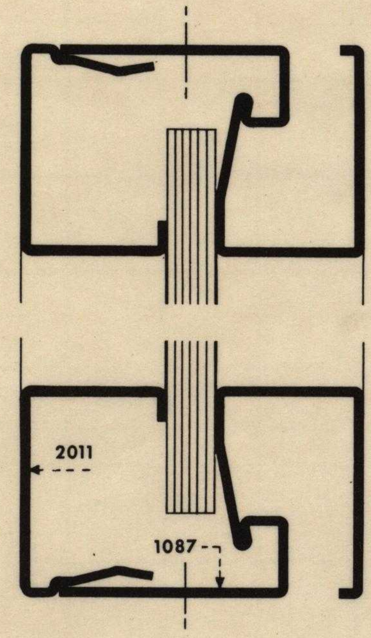
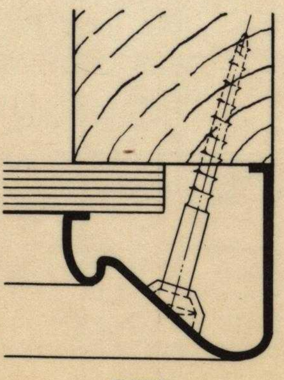
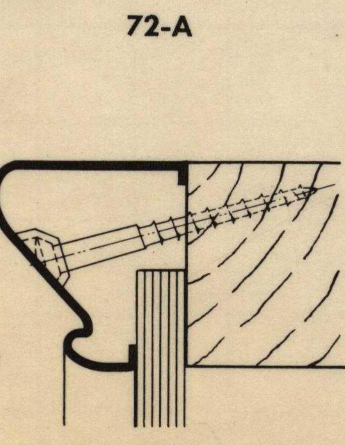


72-A

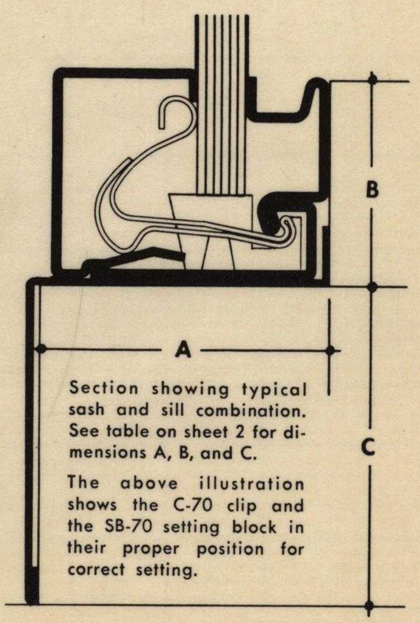


2012

NOTE:
2012 To Be Used At Head and Jamb Only.

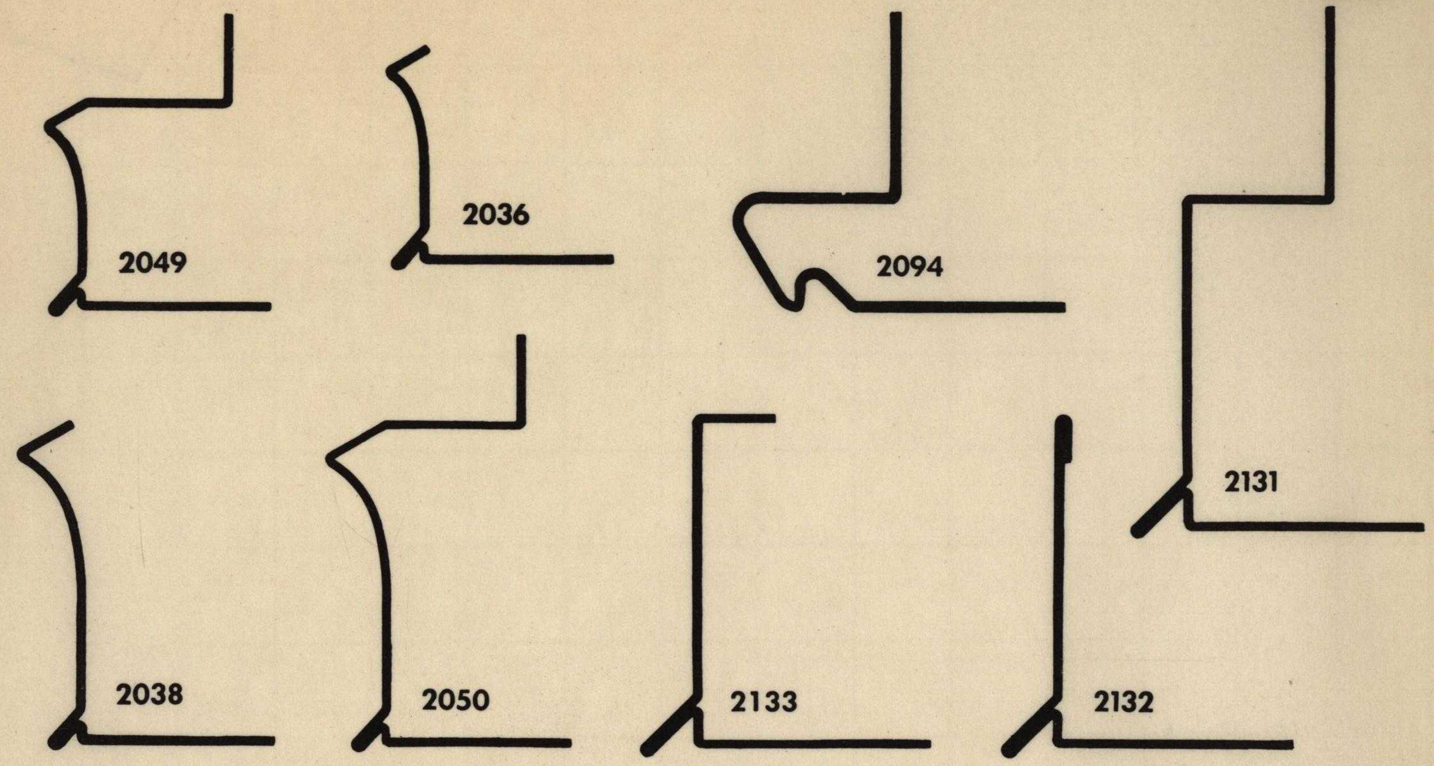


2012

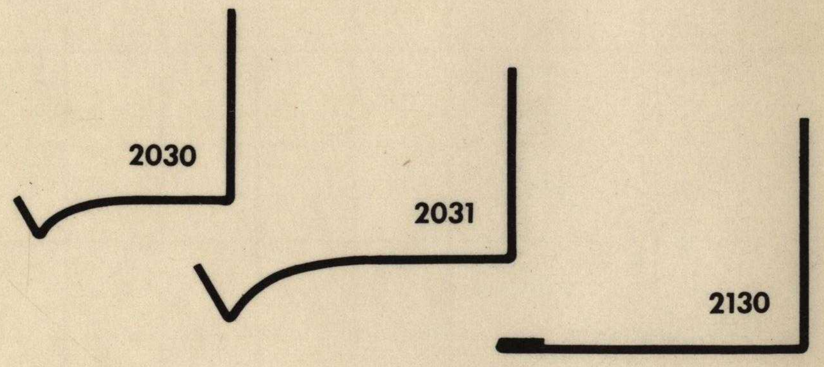


Section showing typical sash and sill combination. See table on sheet 2 for dimensions A, B, and C.

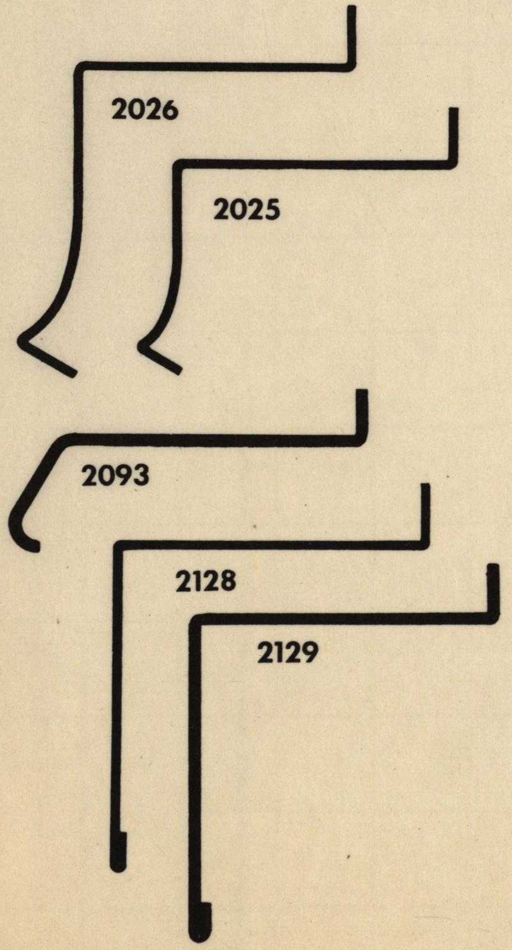
The above illustration shows the C-70 clip and the SB-70 setting block in their proper position for correct setting.



HEAD SECTIONS



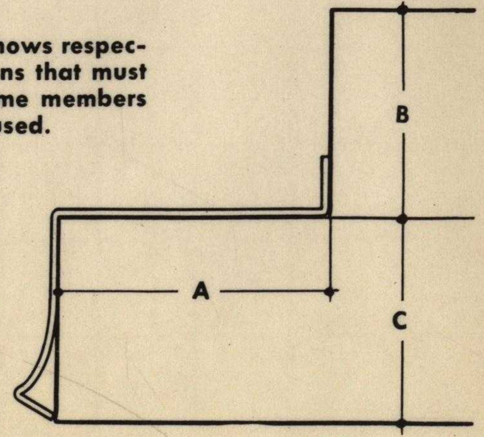
JAMB SECTIONS

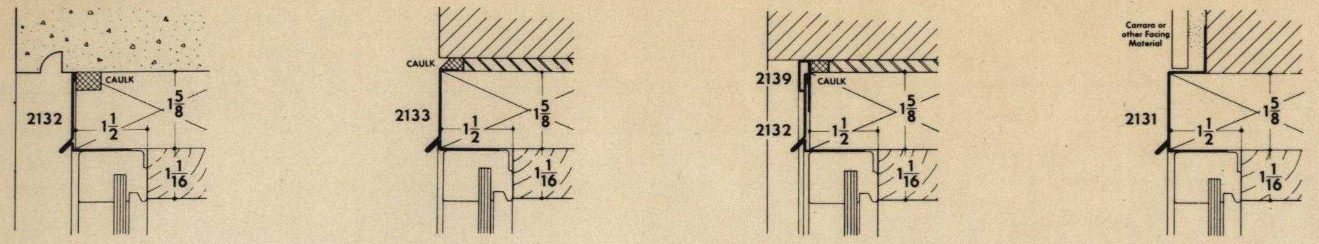


SILL SECTIONS

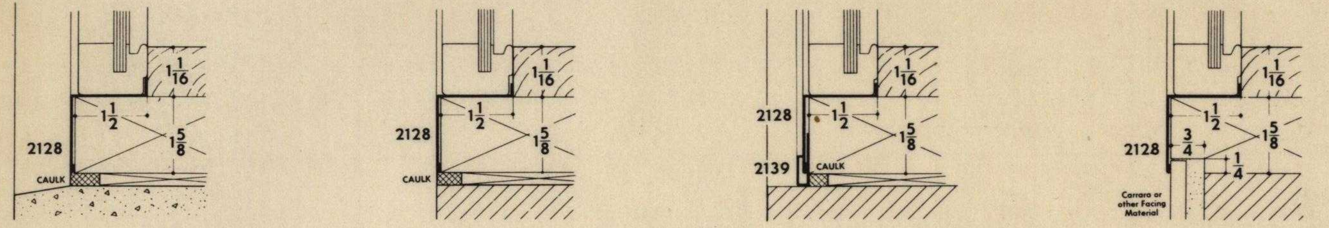
The table below shows respective core dimensions that must be held when frame members on this sheet are used.

SILL	A	B	C
2025	1 7/16	1 1/16	1 1/16
2026	1 7/16	1 1/16	1 5/8
2093	1 1/2	1 1/16	13/16
2128	1 1/2	1 1/16	1 5/8
2129	1 1/2	1 1/16	1 5/8

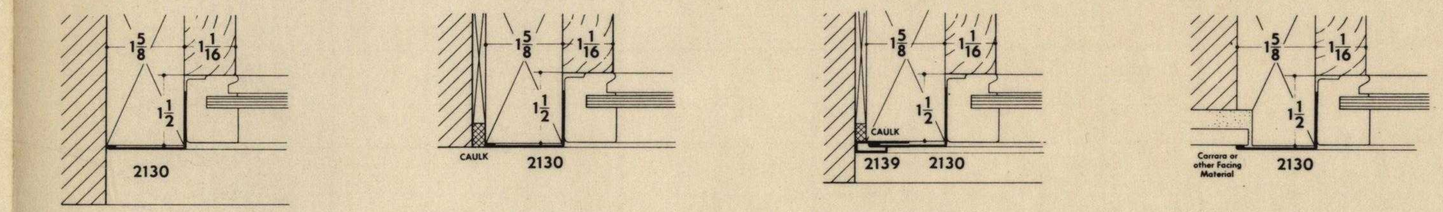




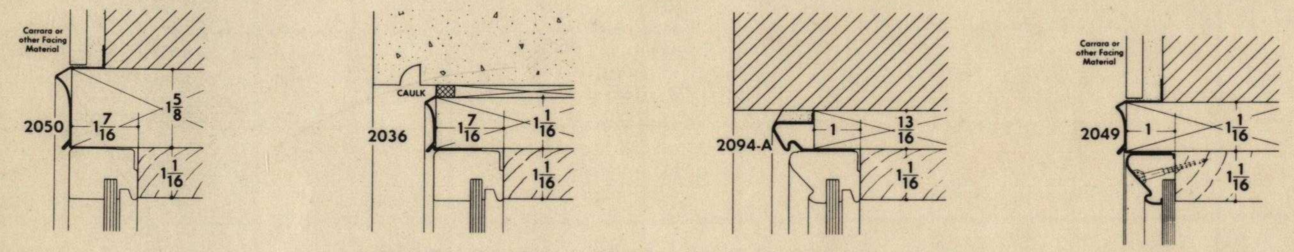
H E A D S E C T I O N S

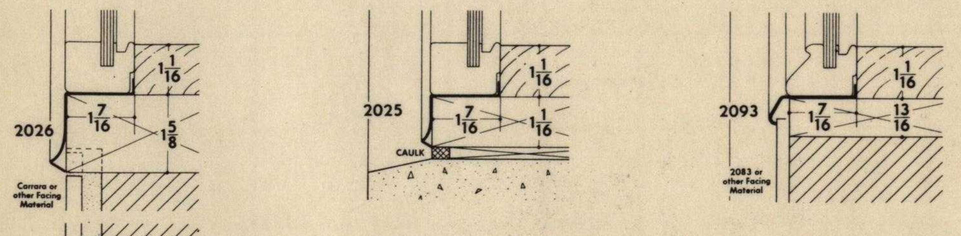


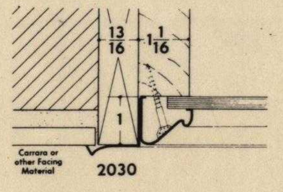
S I L L S E C T I O N S



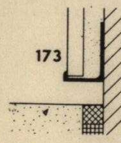
J A M B S E C T I O N S

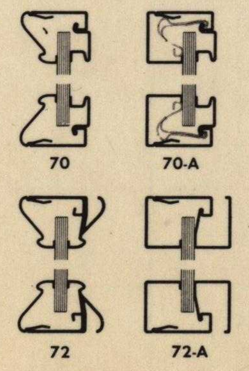


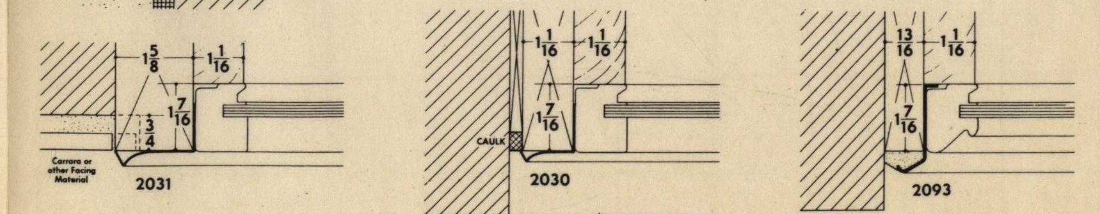

1 1/16
2026
1 7/16
1 5/8
Carrara or other Facing Material
2025
CAULK
1 7/16
1 1/16
2093
1 7/16
13/16
2083 or other Facing Material



S I L L S E C T I O N S

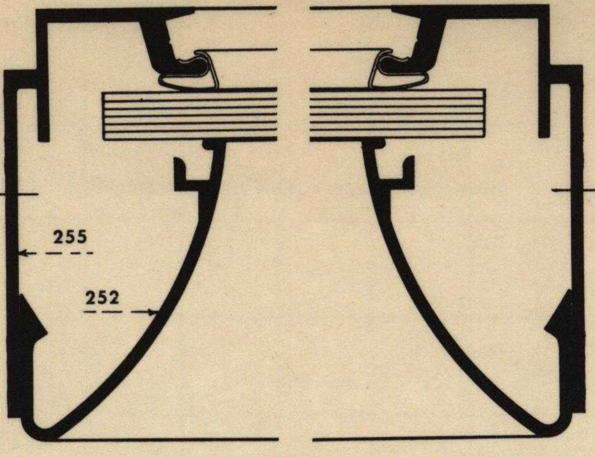




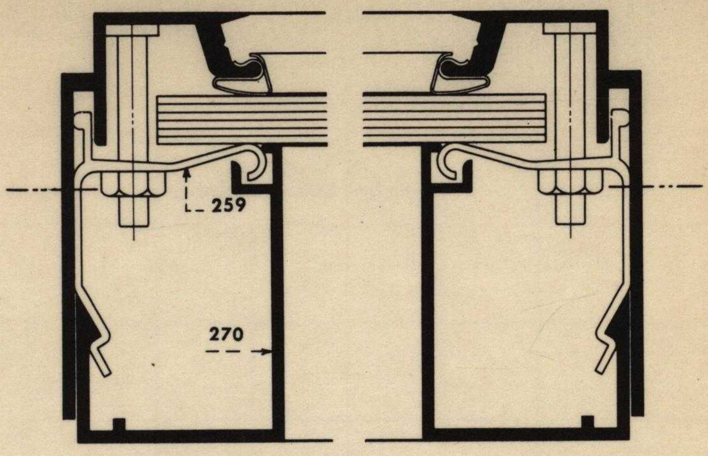


J A M B S E C T I O N S

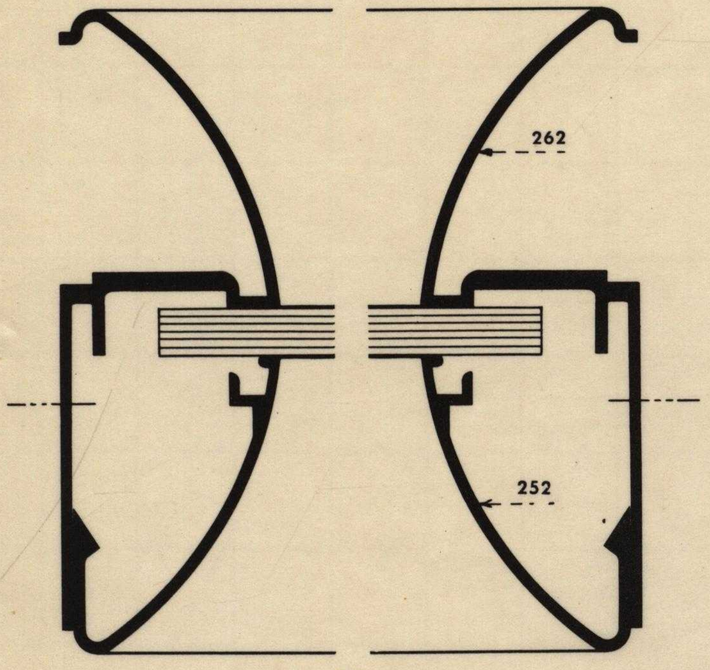
SCALE 3" = 1'-0"



12-A



12-C



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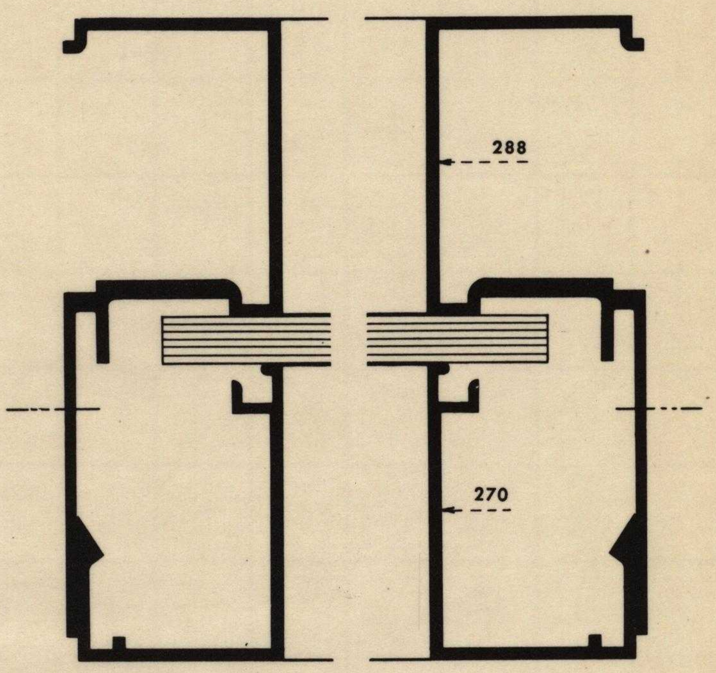
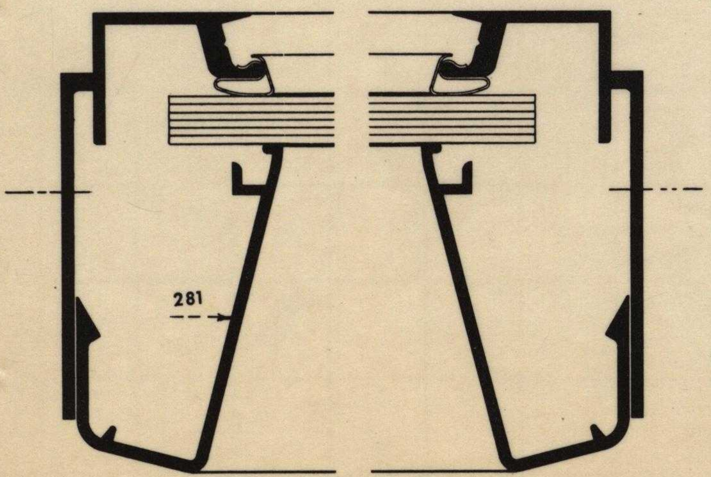
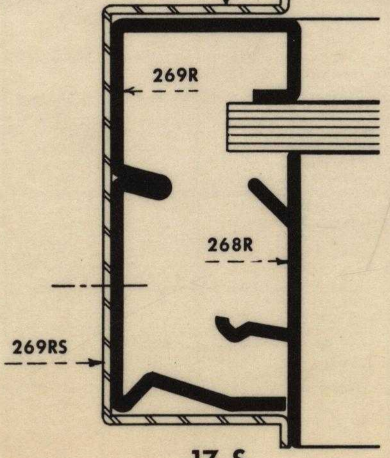


15-C

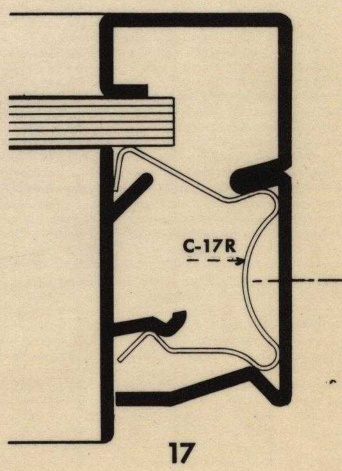


12-D

Steel housing optional at additional cost

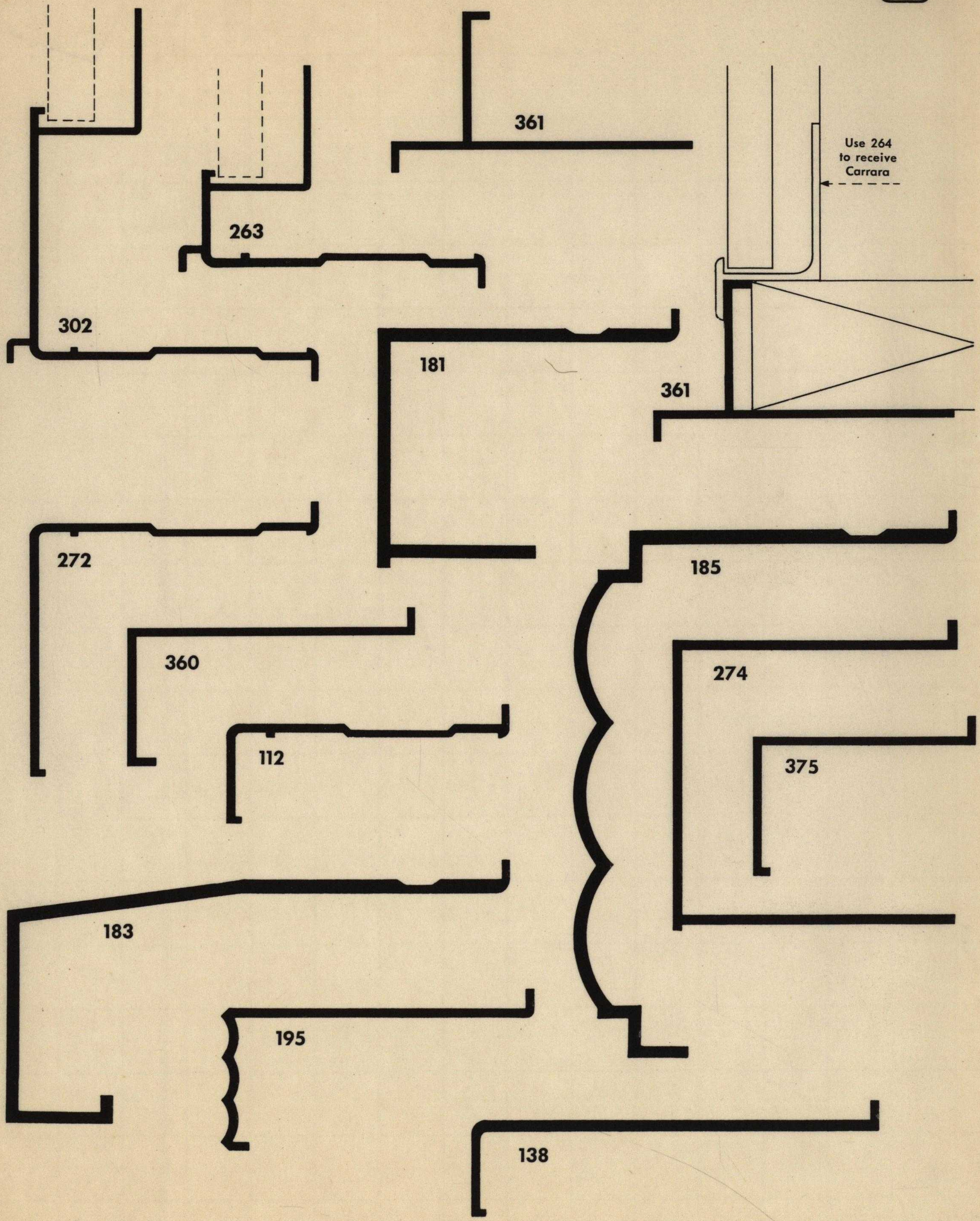


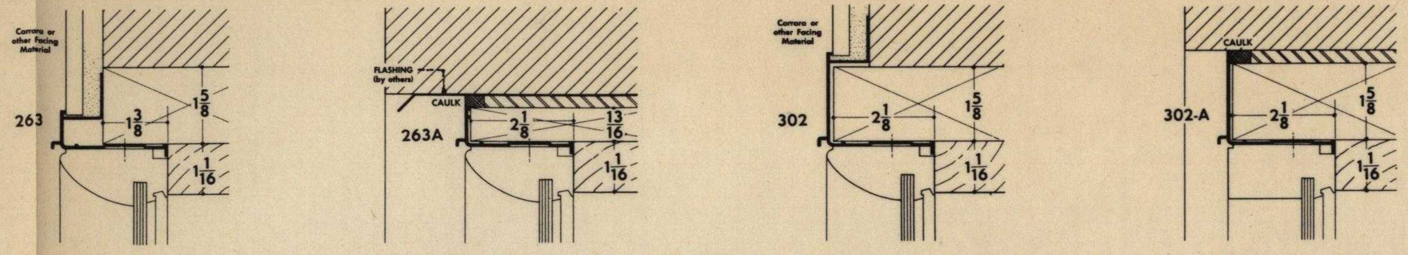
17-S



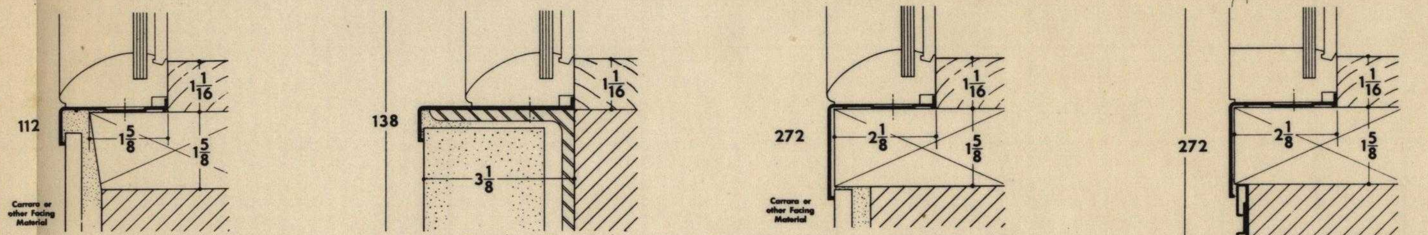
17

NOTE:
SB-12 setting block must be used on all sill installations.

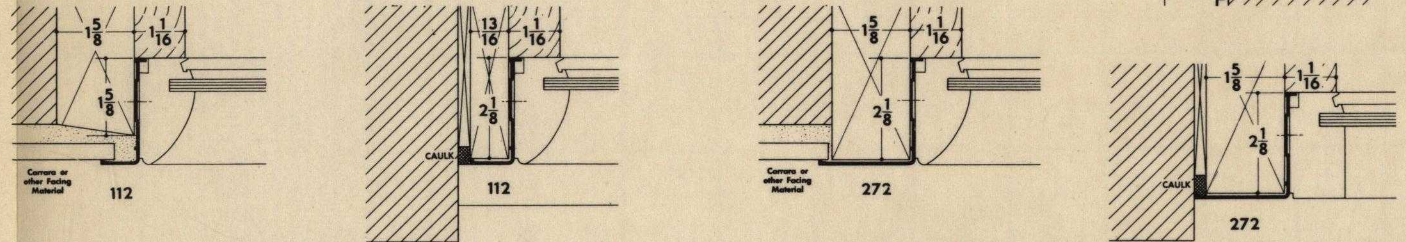




HEAD SECTIONS


112
1 5/8
1 1/16
Carrara or other Facing Material
138
3 1/8
272
2 1/8
2083 or other Facing Material

SILL SECTIONS



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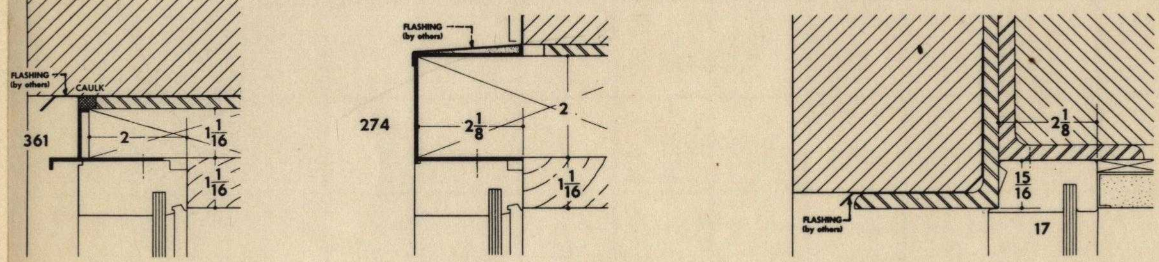

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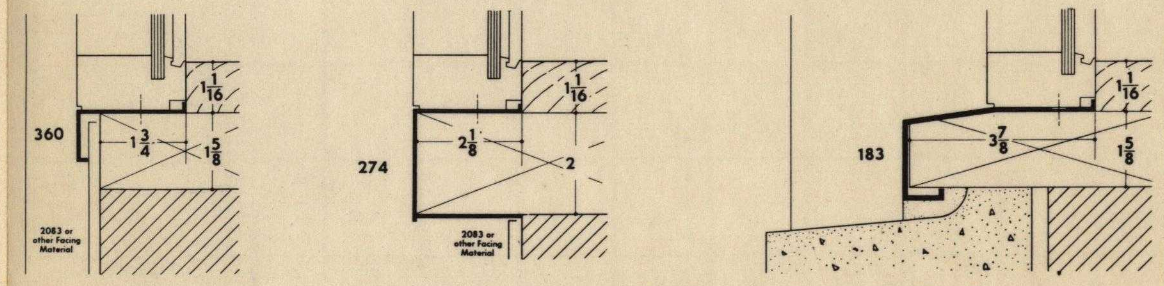
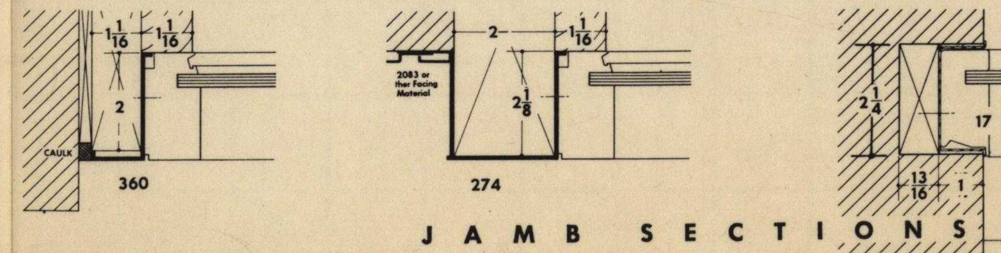
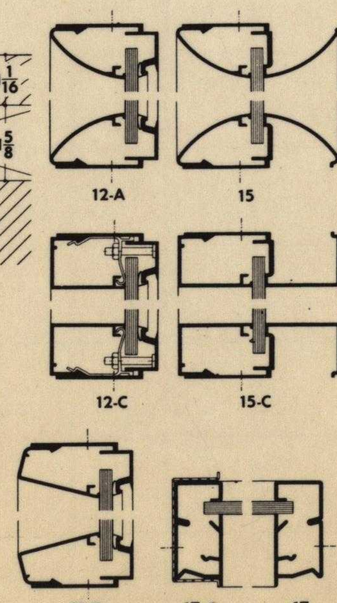
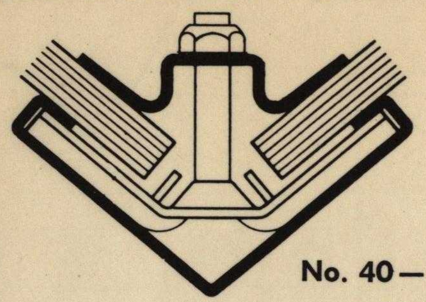


SILL SECTIONS



JAMB SECTIONS

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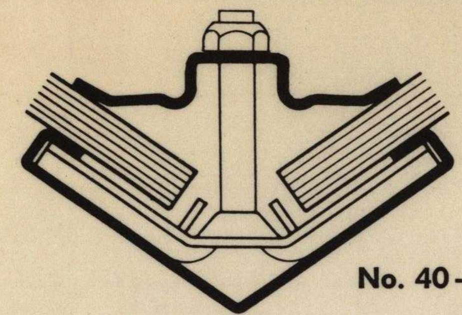
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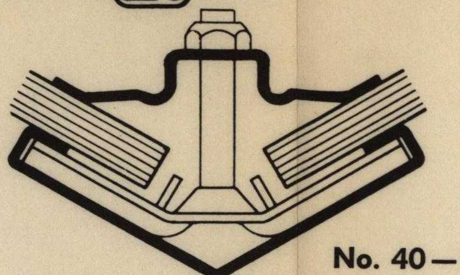
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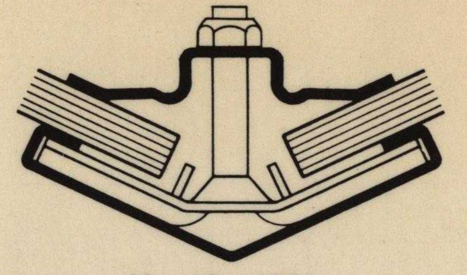
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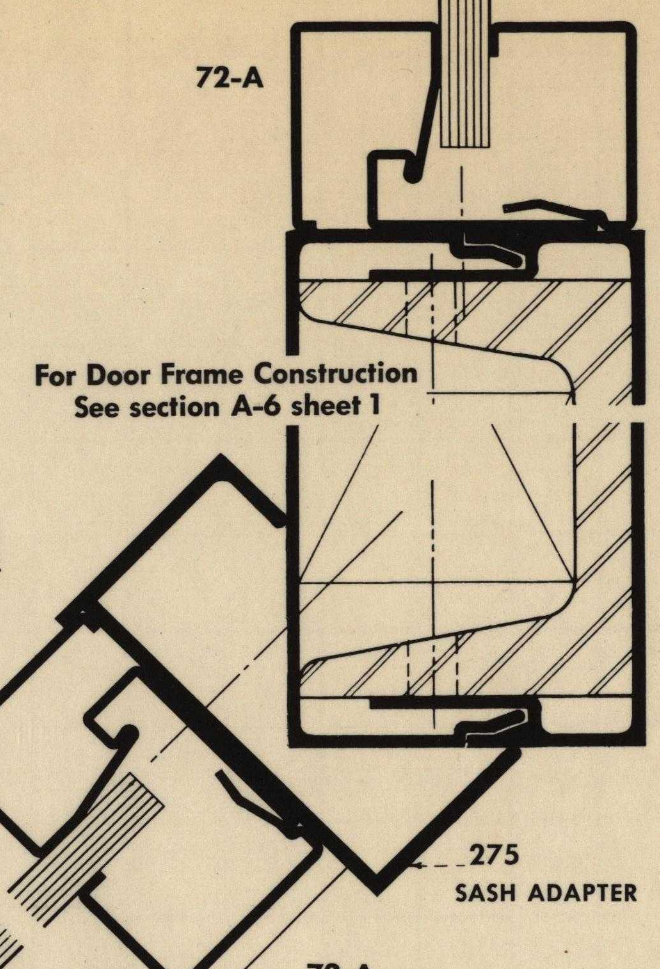
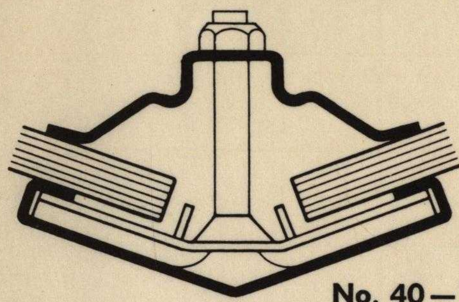

72-A

For Door Frame Construction
See section A-6 sheet 1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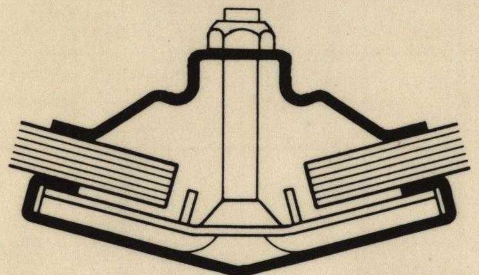
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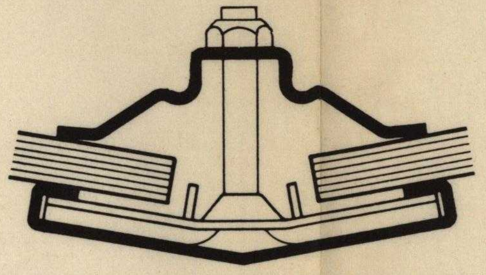
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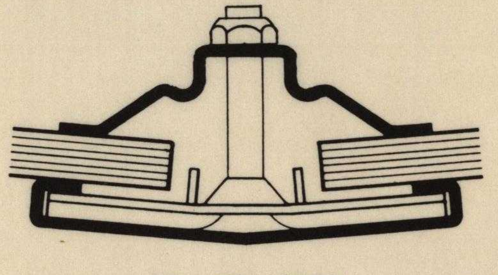
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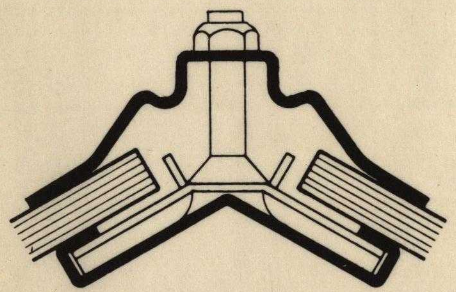
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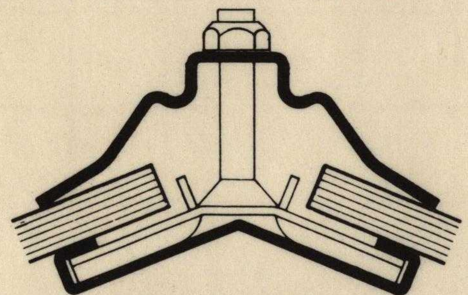
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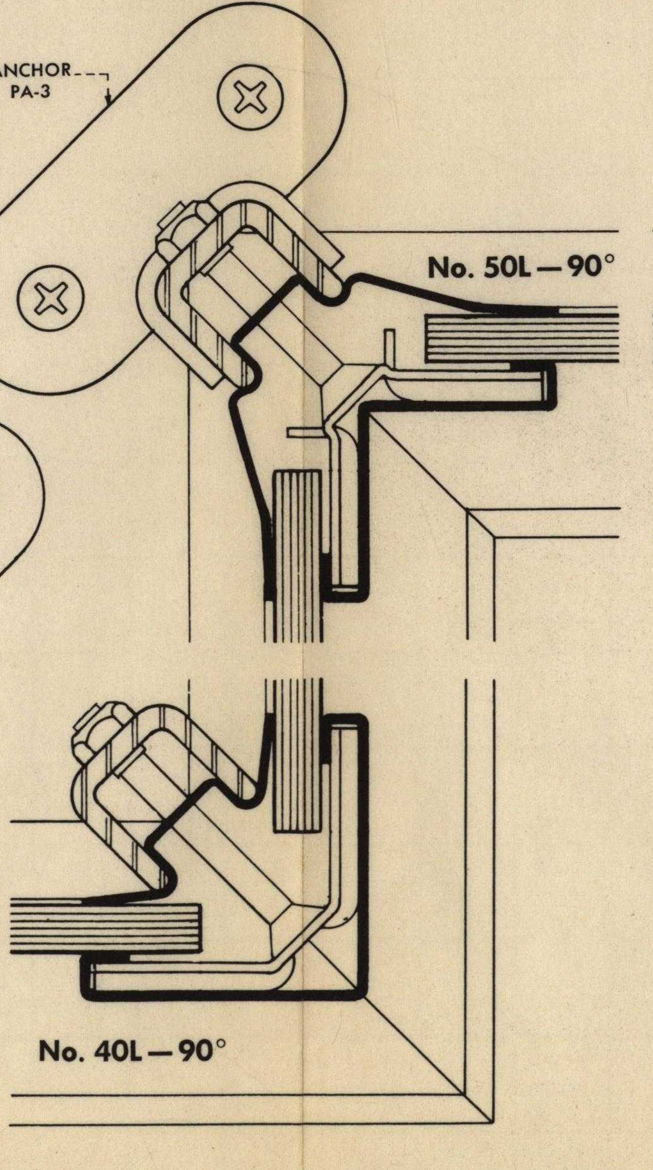

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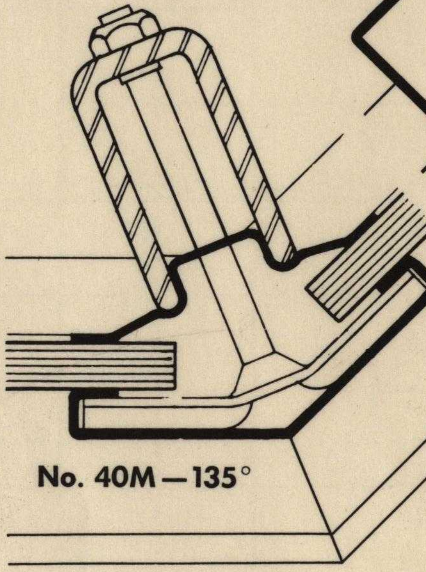
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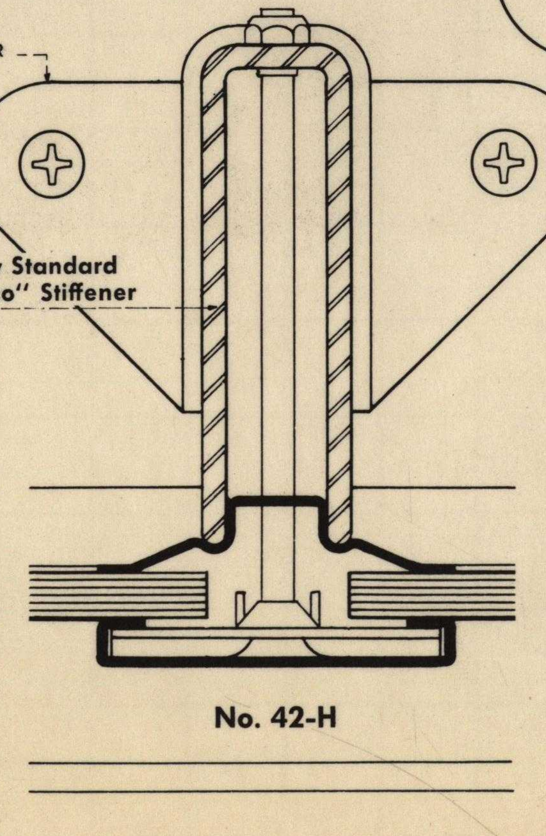

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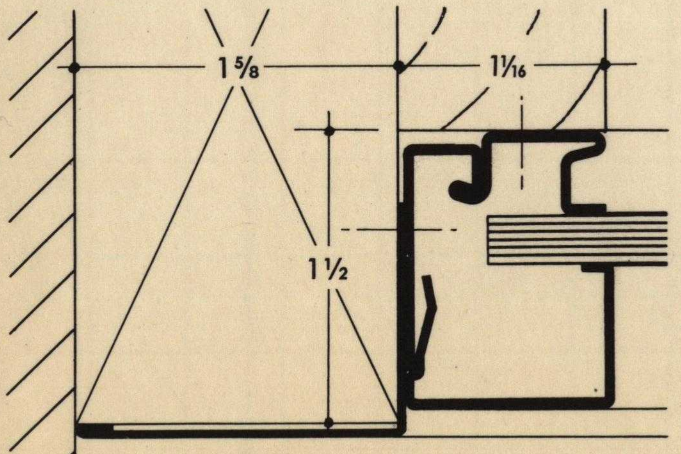
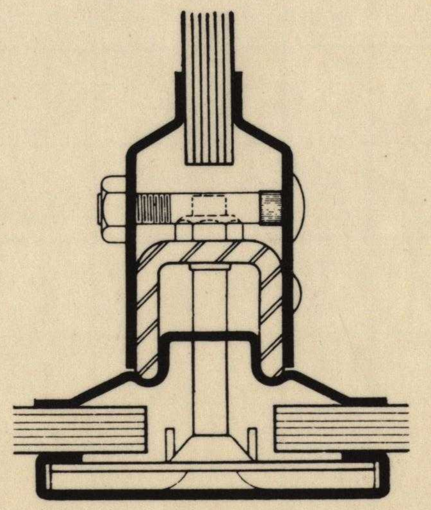


2130

70-A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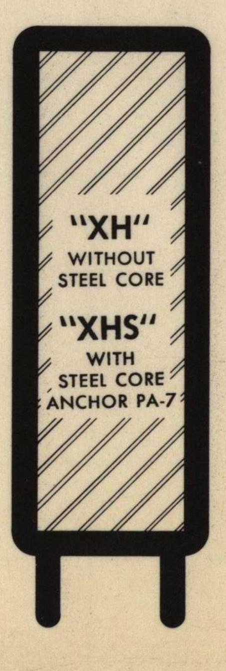
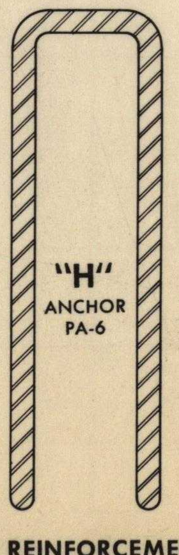
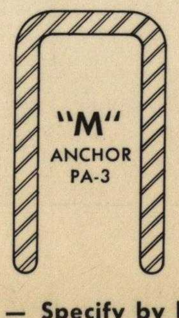
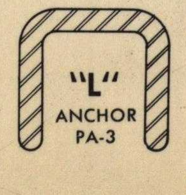
THREE WAY BAR

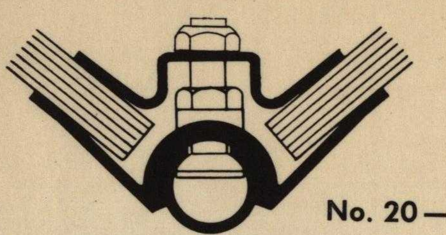

"XH"
WITHOUT
STEEL CORE
"XHS"
WITH
STEEL CORE
ANCHOR PA-7


"H"
ANCHOR
PA-6


"M"
ANCHOR
PA-3


"L"
ANCHOR
PA-3

BAR REINFORCEMENTS — Specify by letter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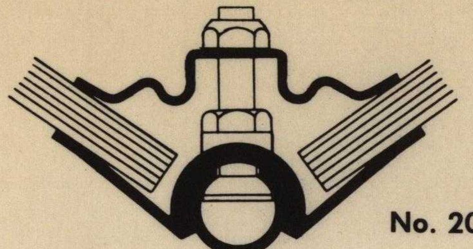
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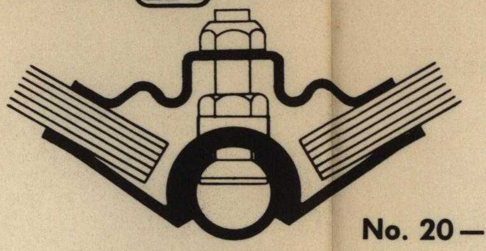
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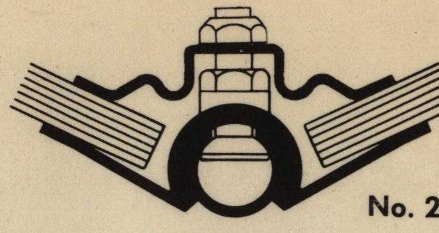
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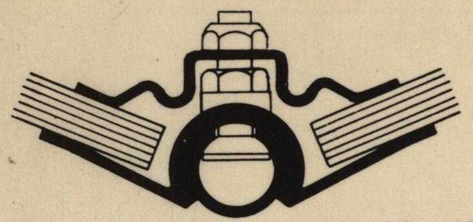
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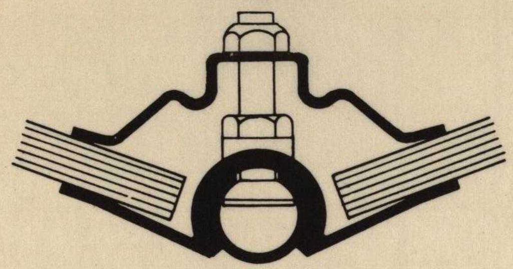
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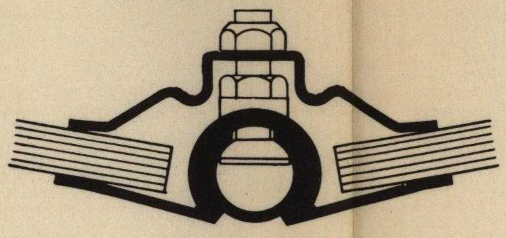
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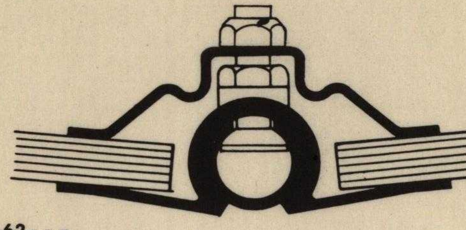
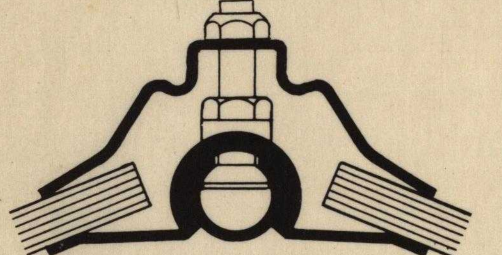
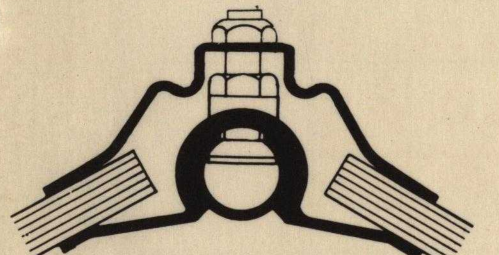

No. 20—170°


No. 30—135°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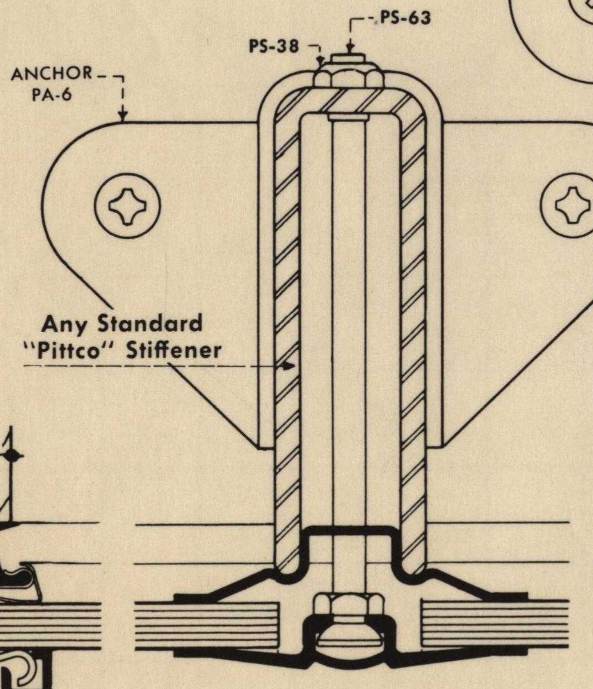
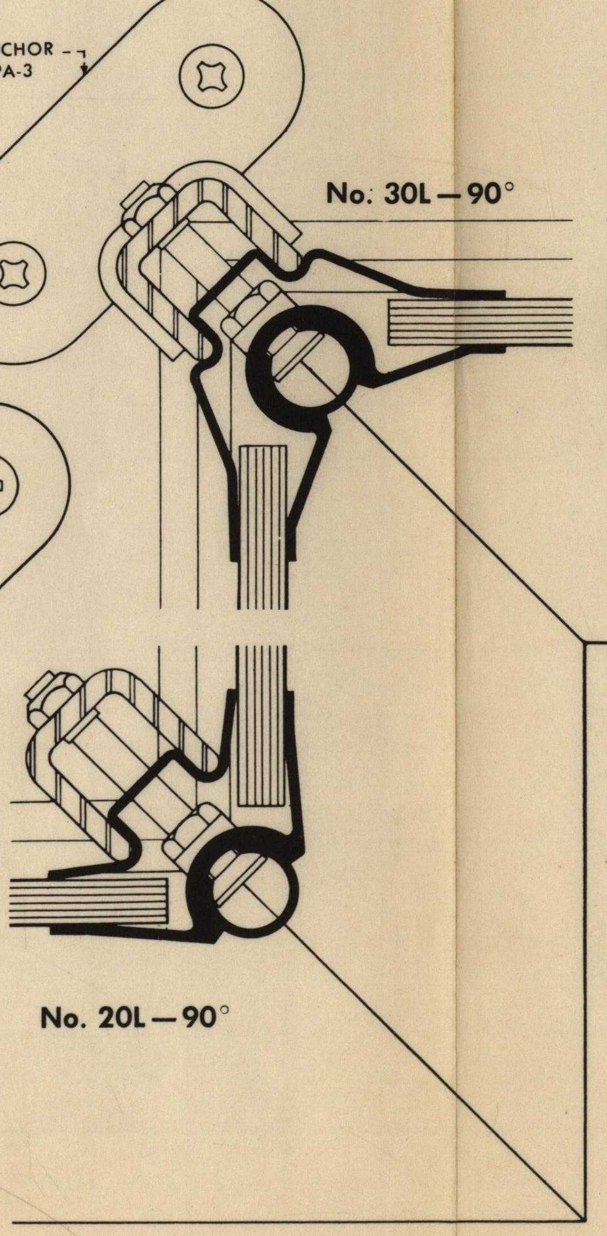
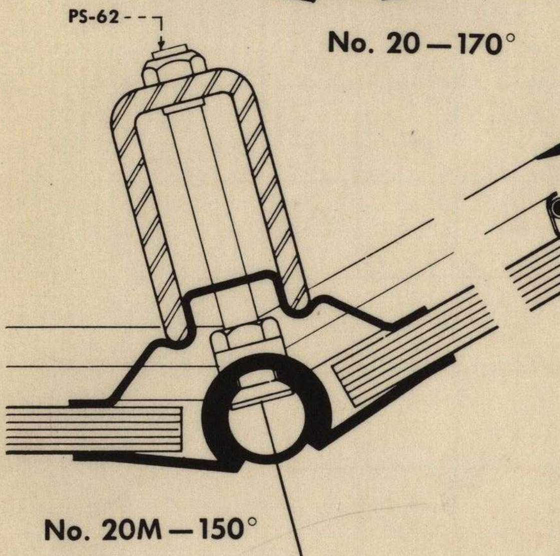


No. 22H



No. 30L—90°

No. 20L—90°



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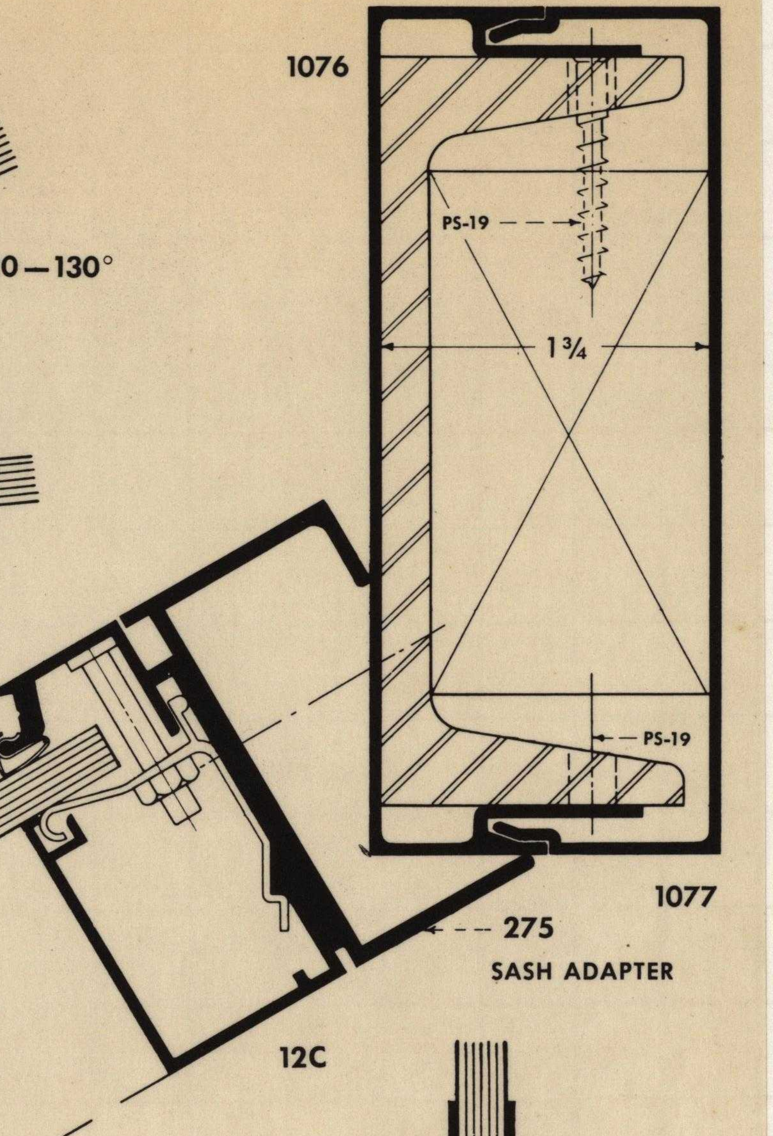
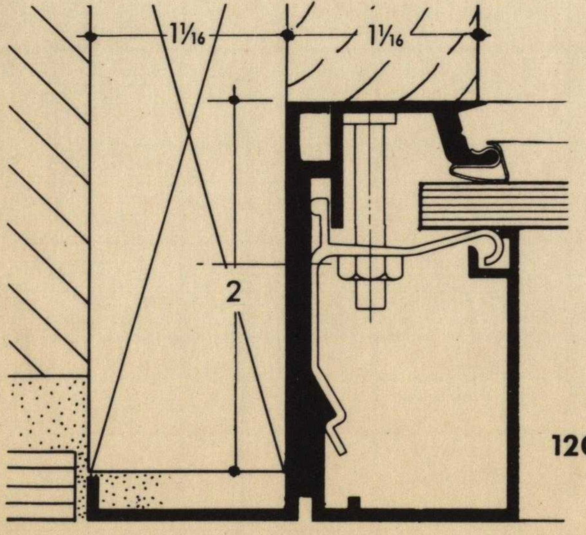
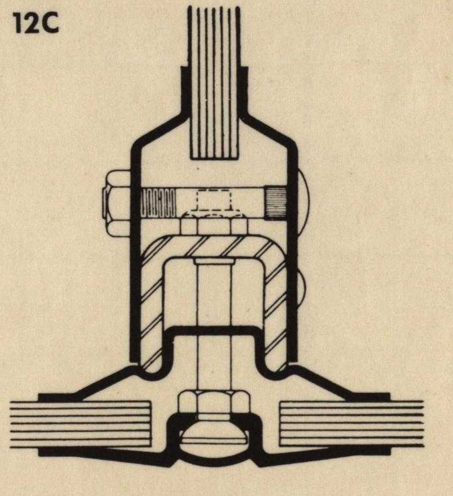


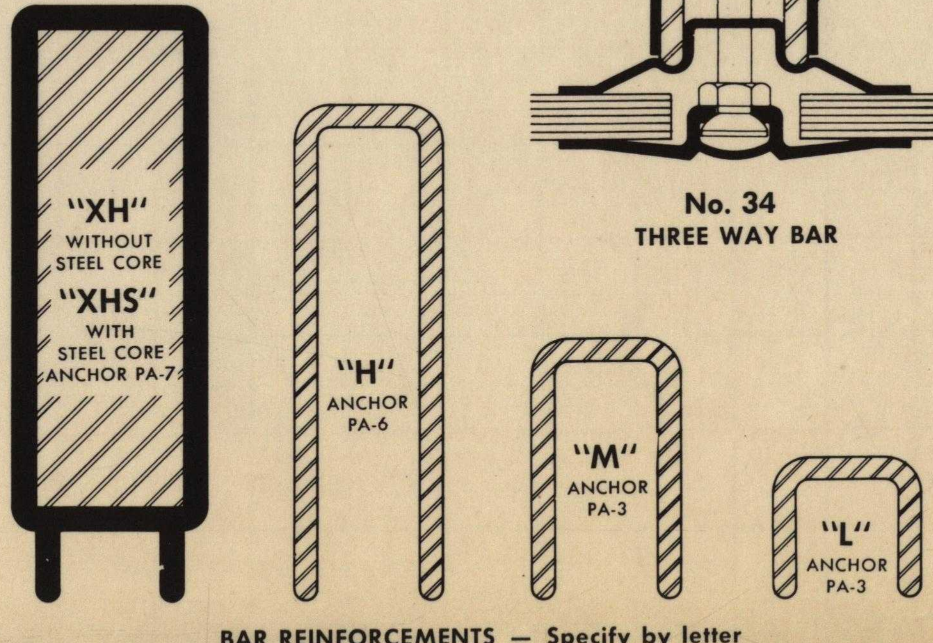
1076

1077

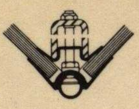


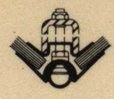
360


No. 34
THREE WAY BAR



BAR REINFORCEMENTS — Specify by letter


No. 20-90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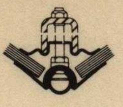
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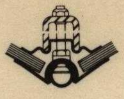
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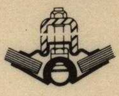
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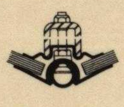
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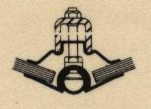
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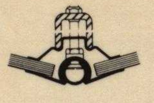
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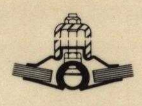
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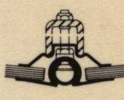
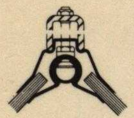
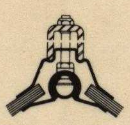

No. 20-170


No. 30-90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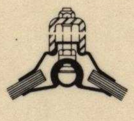
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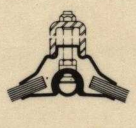
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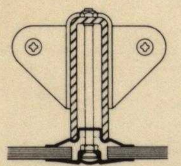
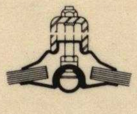

No. 22-H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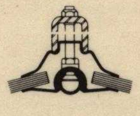
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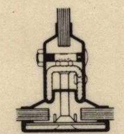
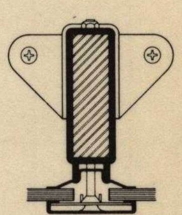
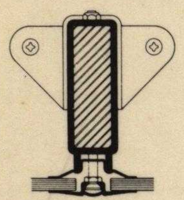

No. 54
3 Way Bar


No. 42-XHS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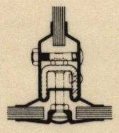
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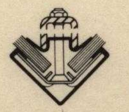
3 Way Bar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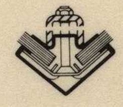
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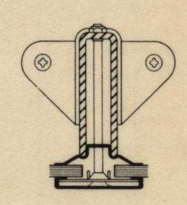
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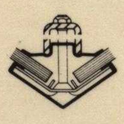
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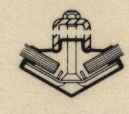
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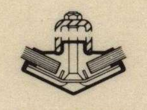
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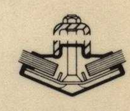
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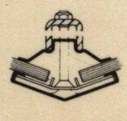
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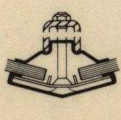
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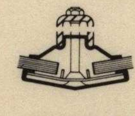
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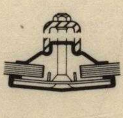
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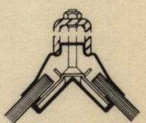
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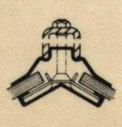
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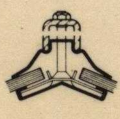
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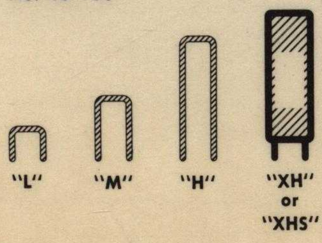
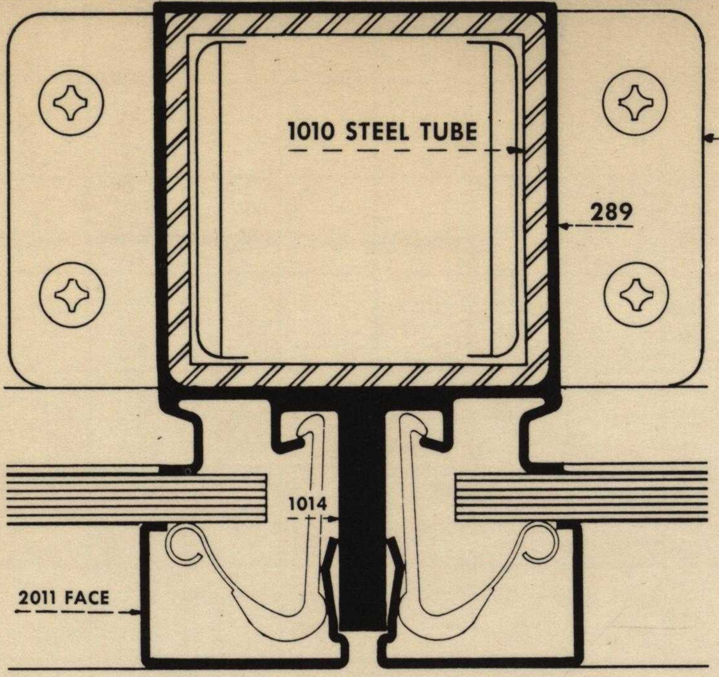
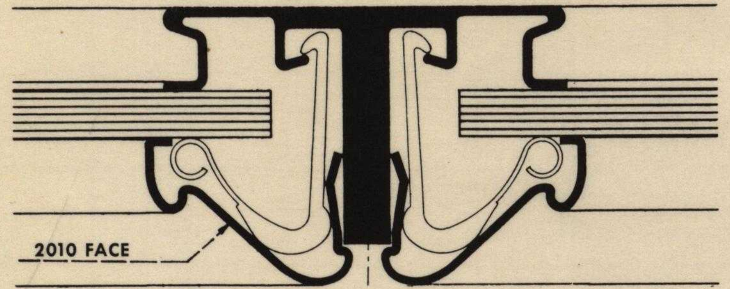


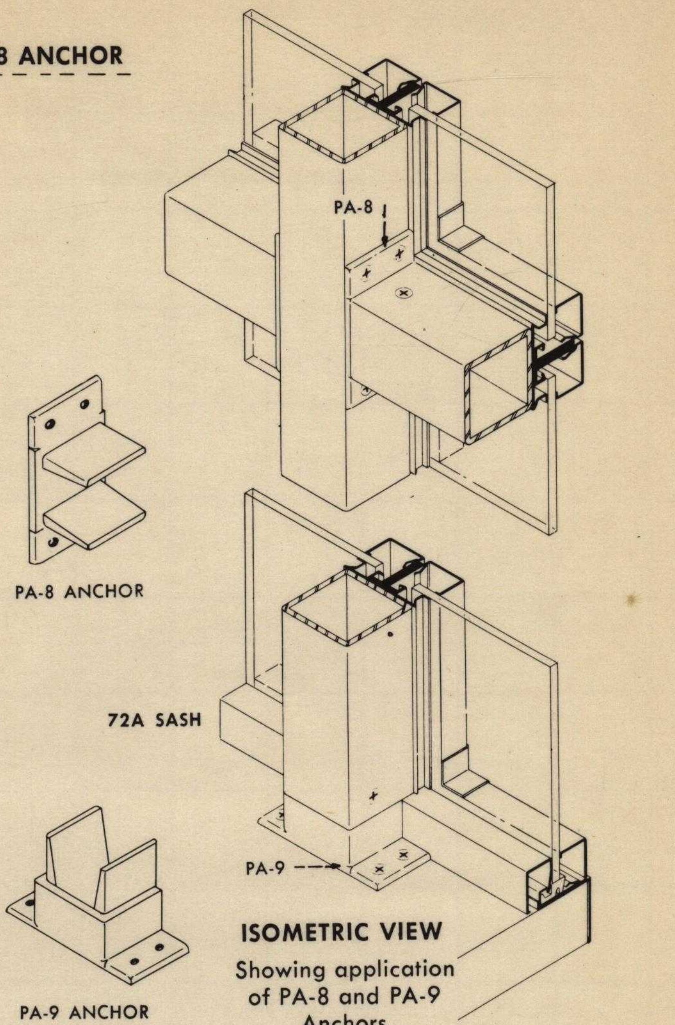
BAR REINFORCEMENTS



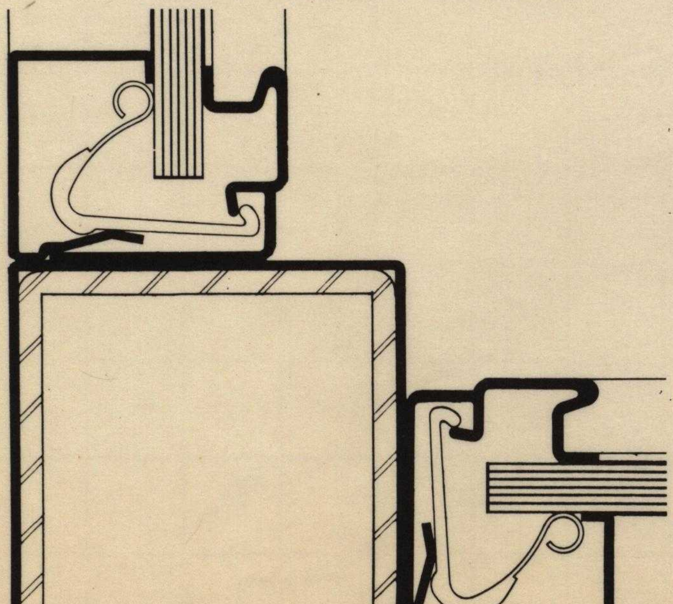
82A-TC Illustrated
82A-T No. 289 omitted
82A Nos. 289 and 1010 omitted



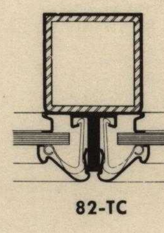
82 Illustrated
82-T Includes No. 1010
82-TC Includes Nos. 289 and 1010



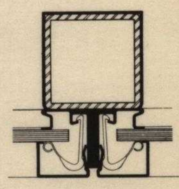
ISOMETRIC VIEW
Showing application of PA-8 and PA-9 Anchors



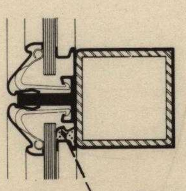
80A Illustrated
80 With 2010 Face



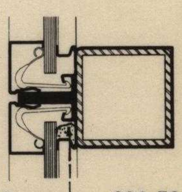
82-TC



82A-TC

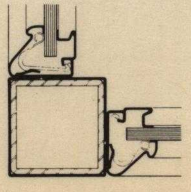


82-TC

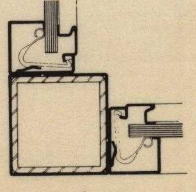


82A-TC

Continuous bead of Glazing Compound at this point on all horizontals.

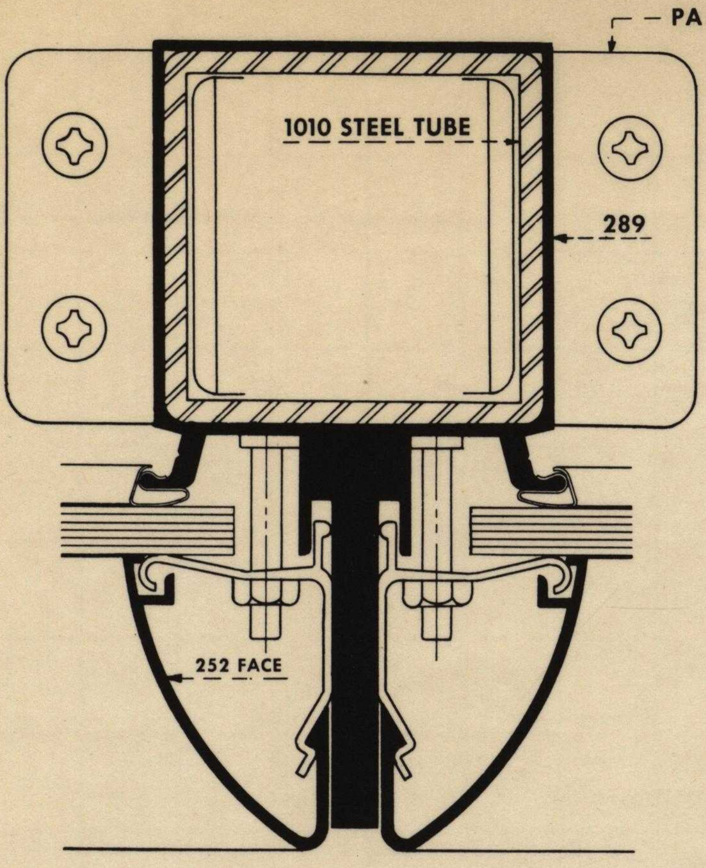


80

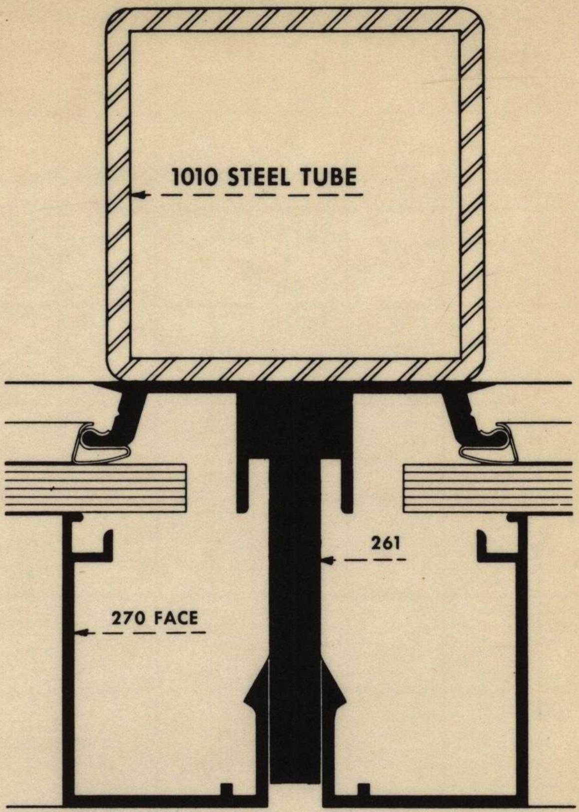


80A

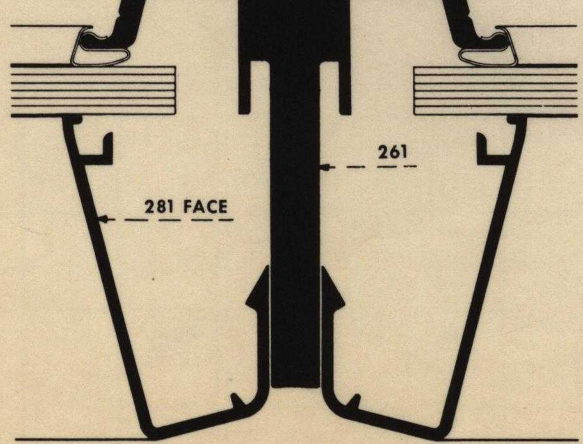
HEAVY DUTY BARS **Rolled Face**



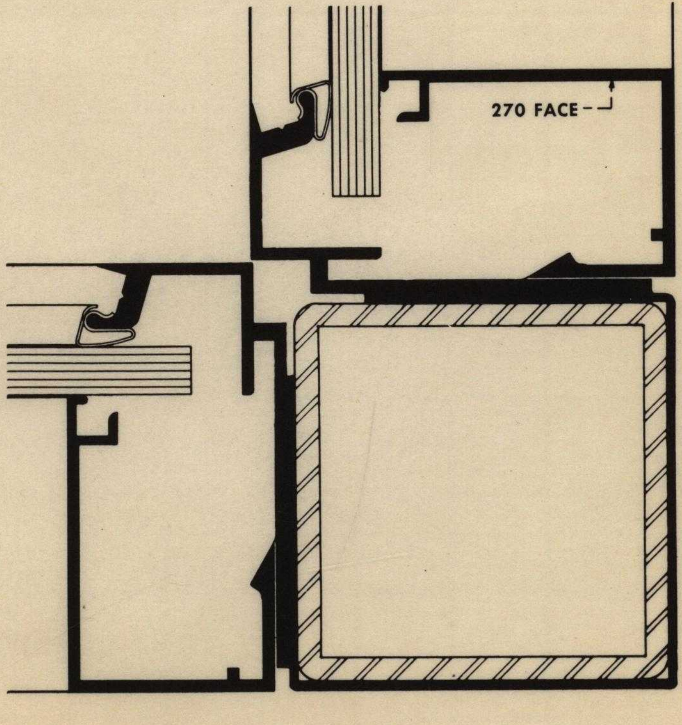
24A-TC Illustrated
24A-T No. 289 omitted
24A Nos. 289 and 1010 omitted



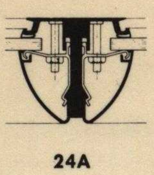
24C-T Illustrated
24C-TC Includes Nos. 1010 and 289
24C Nos. 289 and 1010 omitted



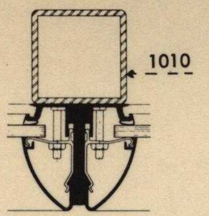
24D Illustrated
24D-T Includes No. 1010
24D-TC Includes Nos. 289 and 1010



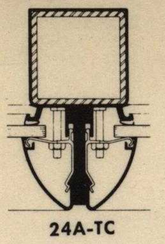
26C Illustrated
26A With 252 Face
26D With 281 Face



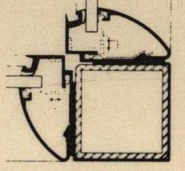
24A



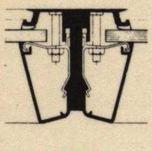
24A-T



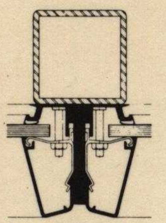
24A-TC



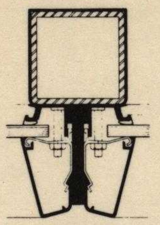
26A



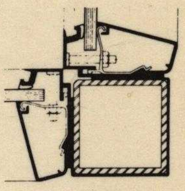
24D



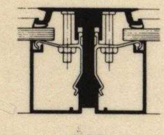
24D-T



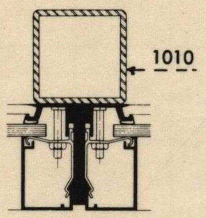
24D-TC



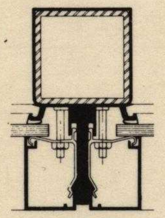
26D



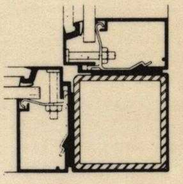
24C



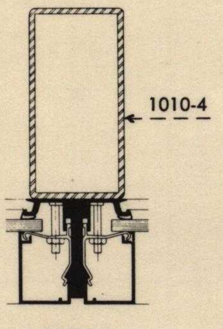
24C-T



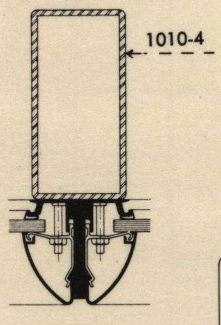
24C-TC



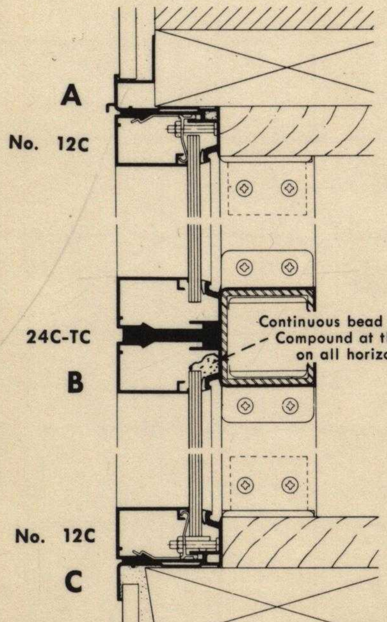
26C



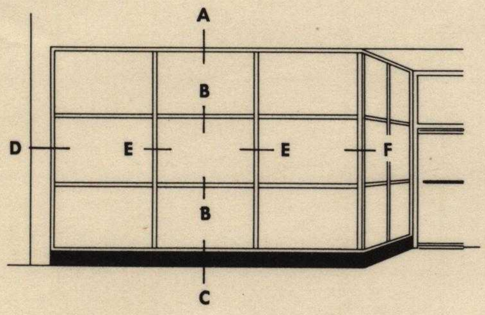
24C-T-4



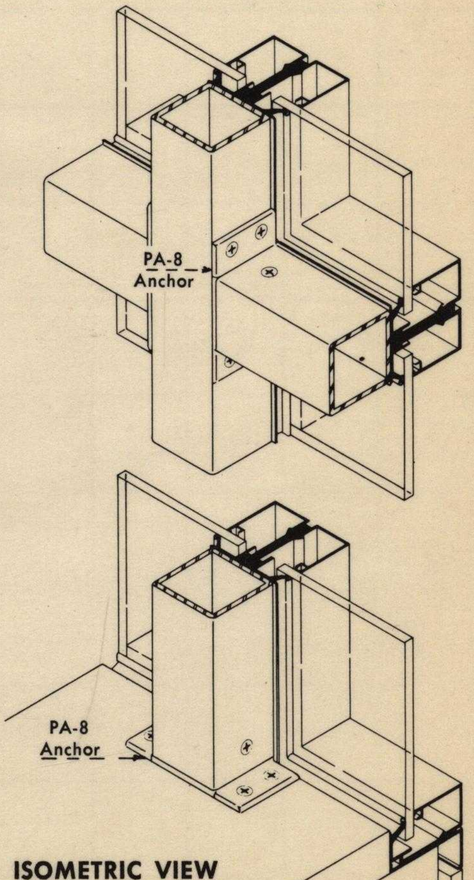
24A-T-4



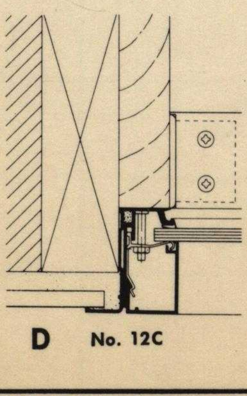
Continuous bead of Glazing Compound at this point on all horizontals.



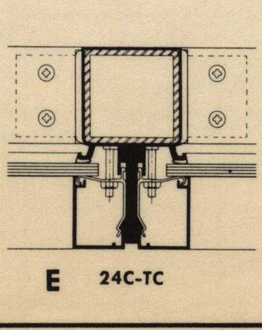
ELEVATION



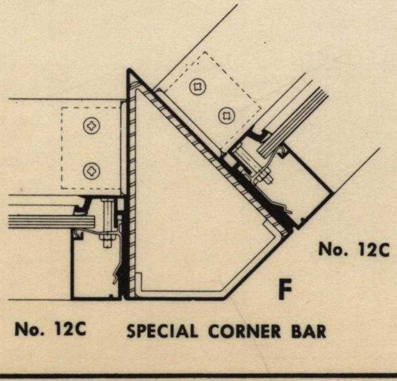
ISOMETRIC VIEW
Showing application
of PA-8 Anchors



D No. 12C



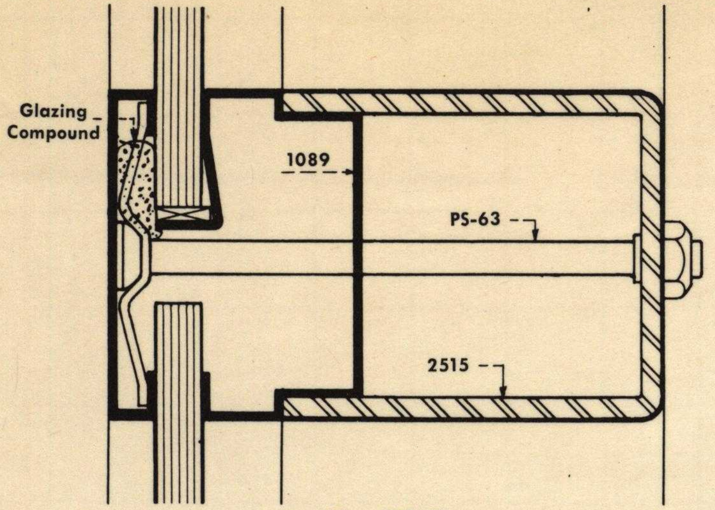
E 24C-TC



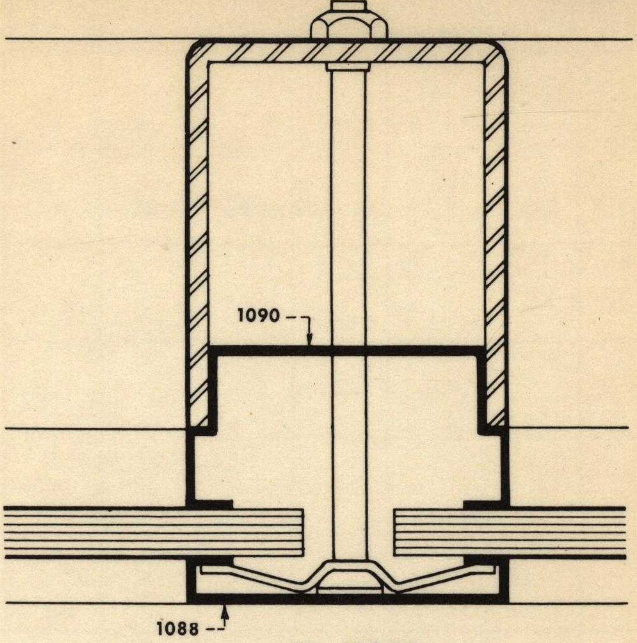
No. 12C SPECIAL CORNER BAR

TYPICAL DETAILS

SCALE 3" = 1'-0"



No. 28-H



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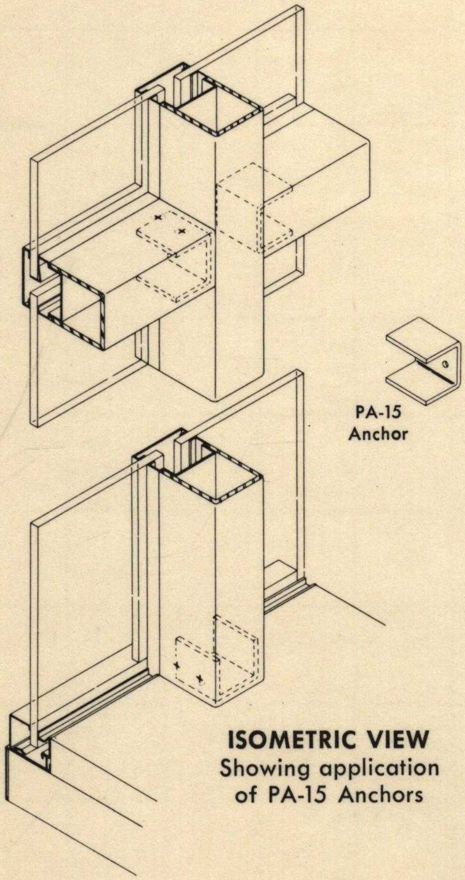
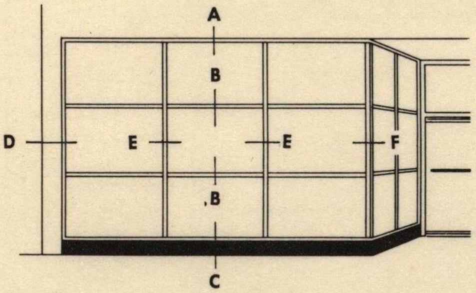
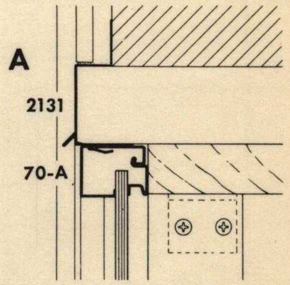


ISOMETRIC VIEW
Showing application
of PA-15 Anchors



ELEVATION



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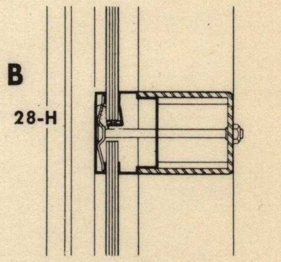

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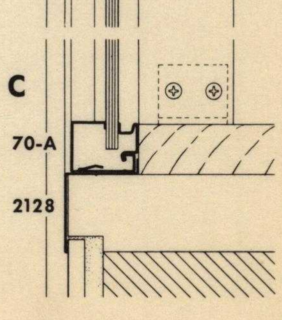

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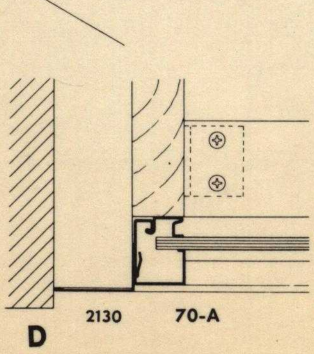
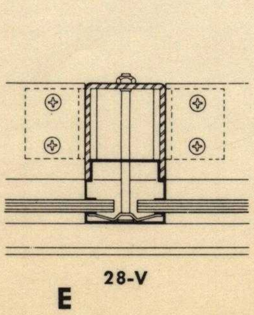


D



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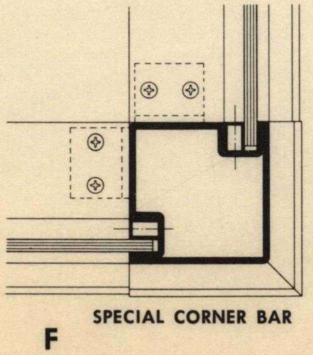

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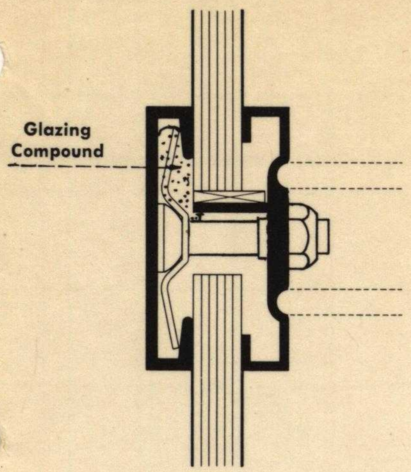
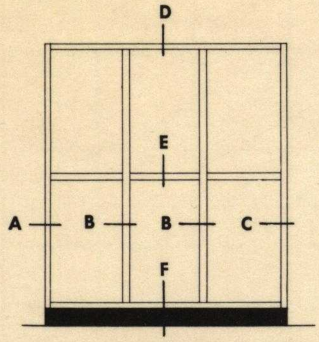
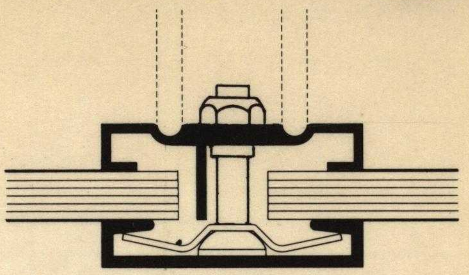


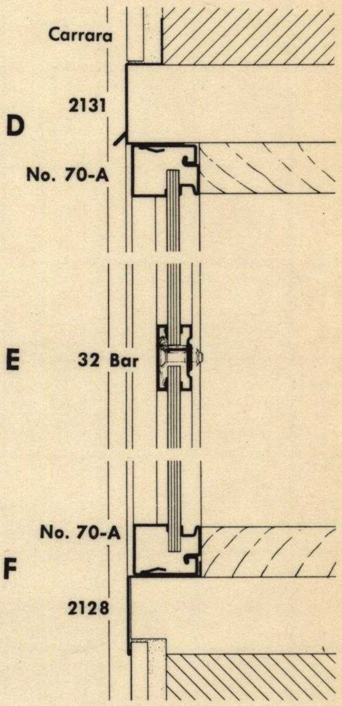
No. 32
Muntin Bar

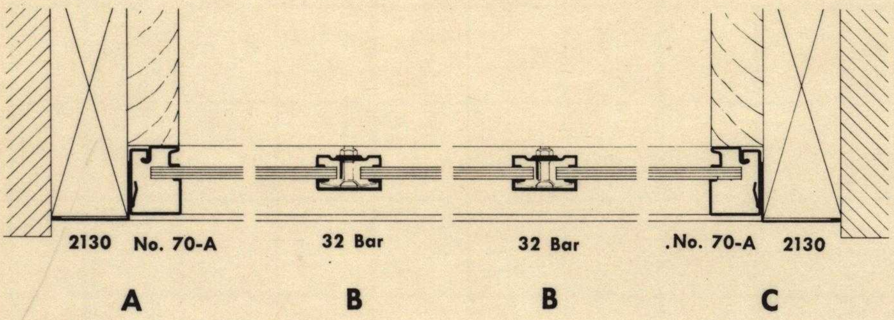


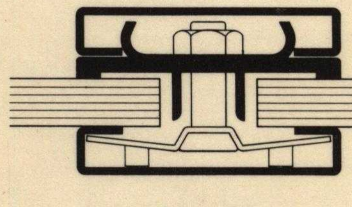
ELEVATION



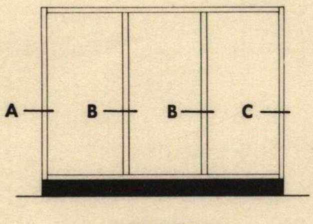
No. 32
Muntin Bar



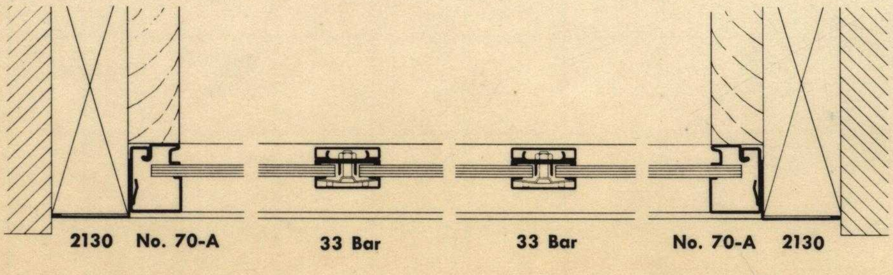


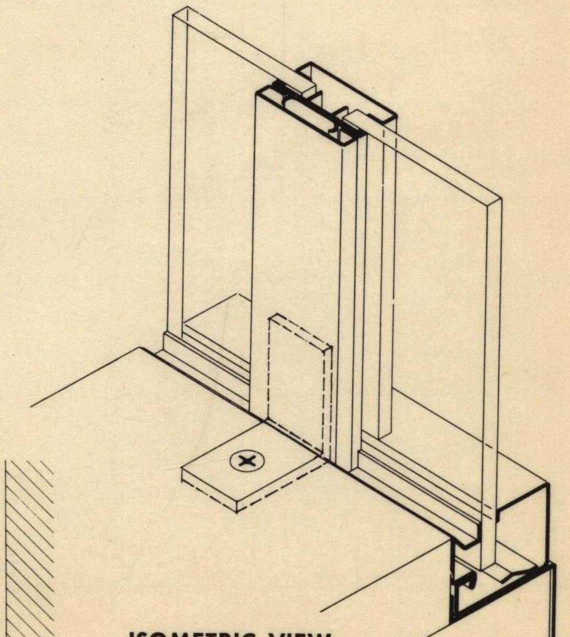


No. 33
Muntin Bar
(Patent Pending)

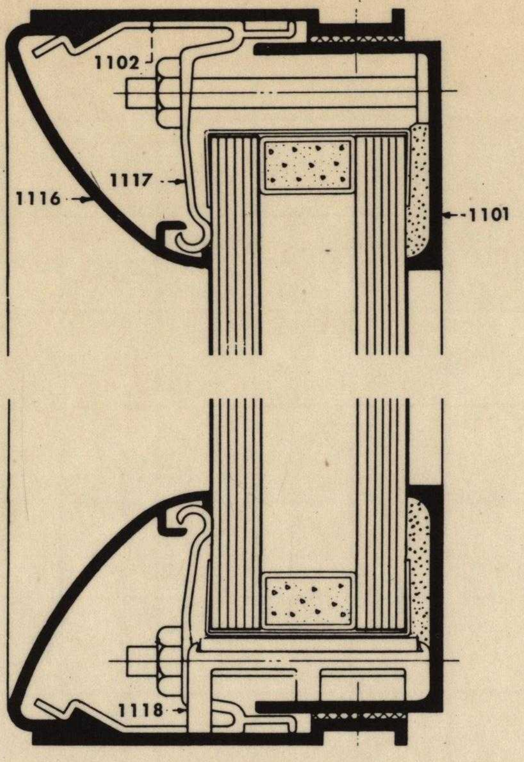


ELEVATION

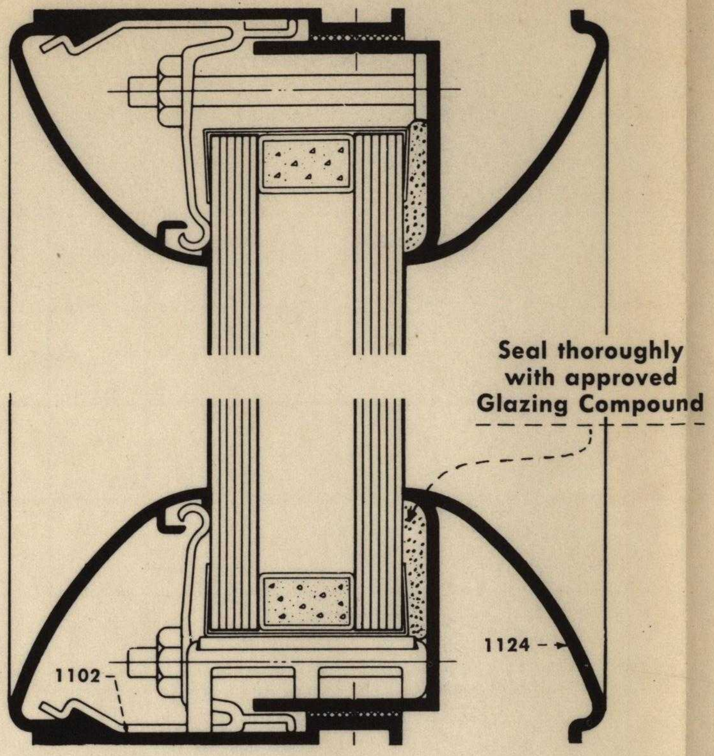




ISOMETRIC VIEW
Showing Anchor

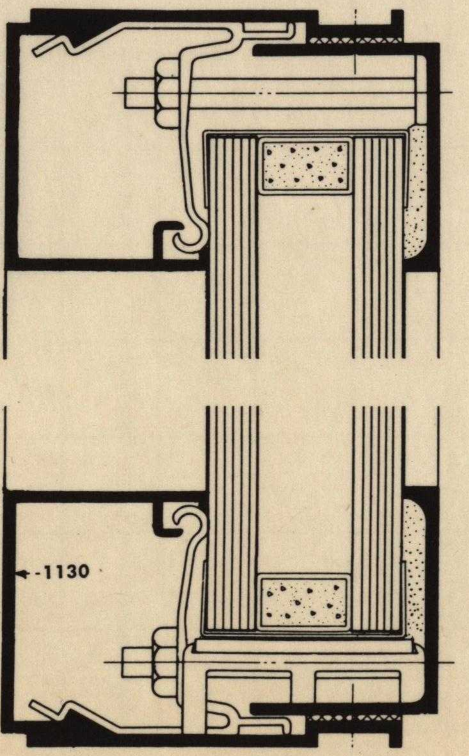


No. 7

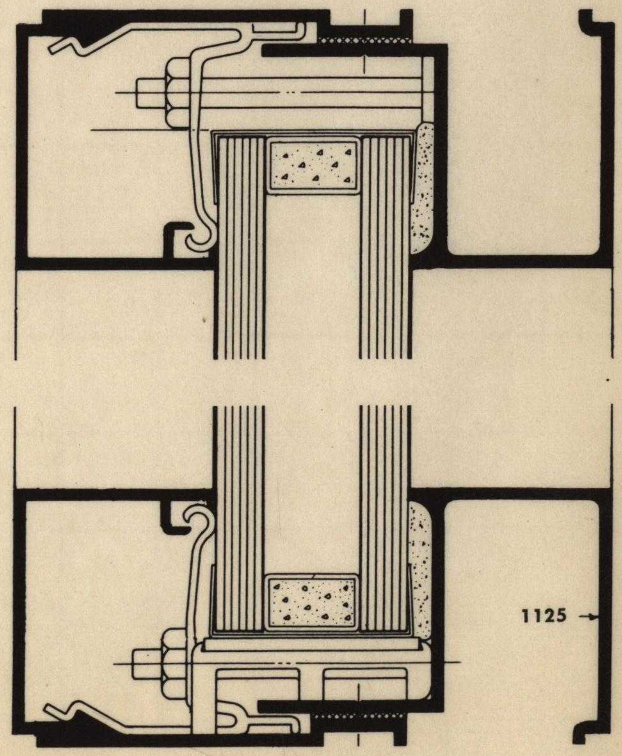


Seal thoroughly with approved Glazing Compound

No. 5

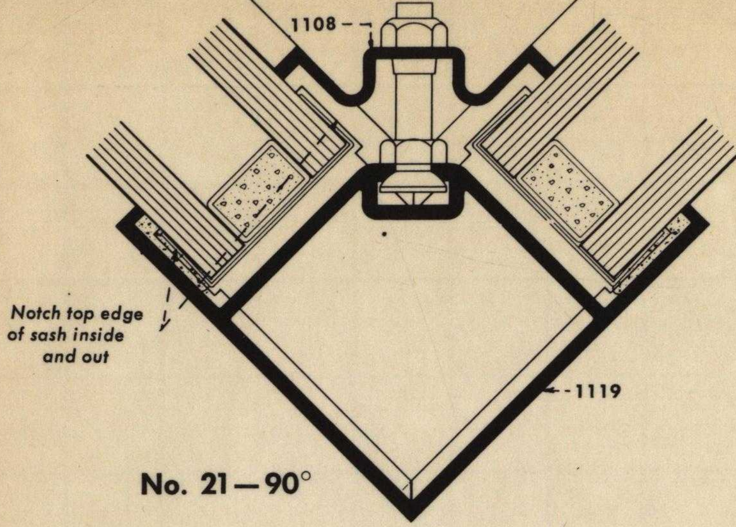


No. 7-C

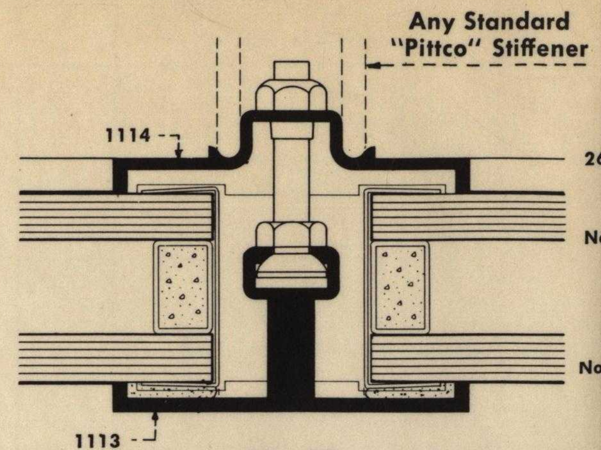


No. 5-C

TWINDOW SETTING Extruded FULL SIZE SECTIONS



No. 21—90°



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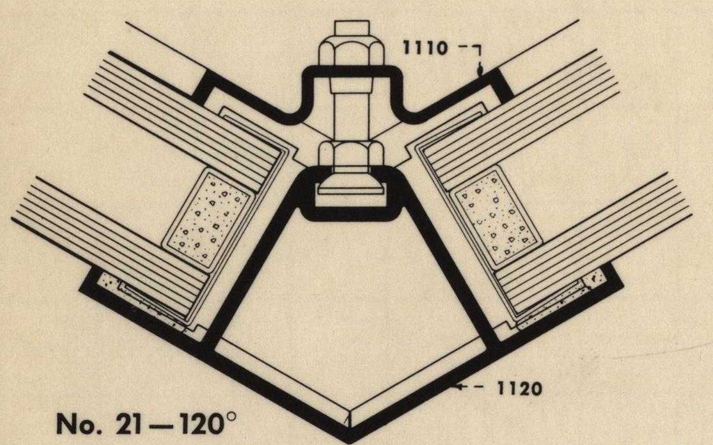

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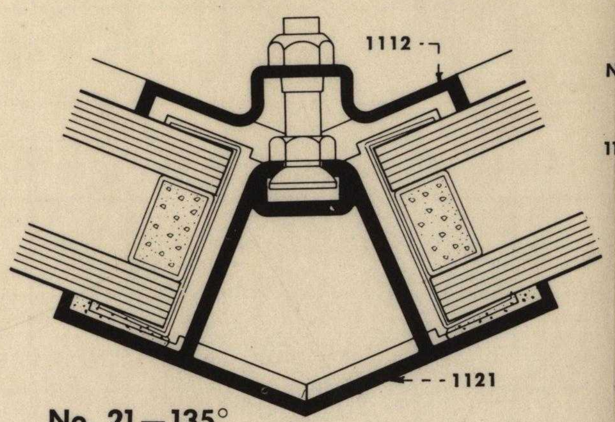

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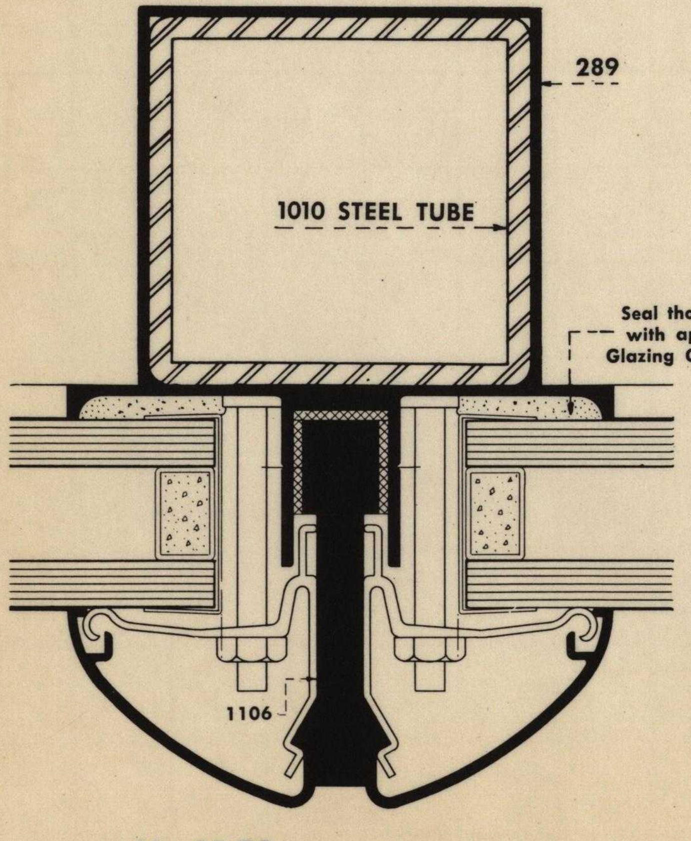
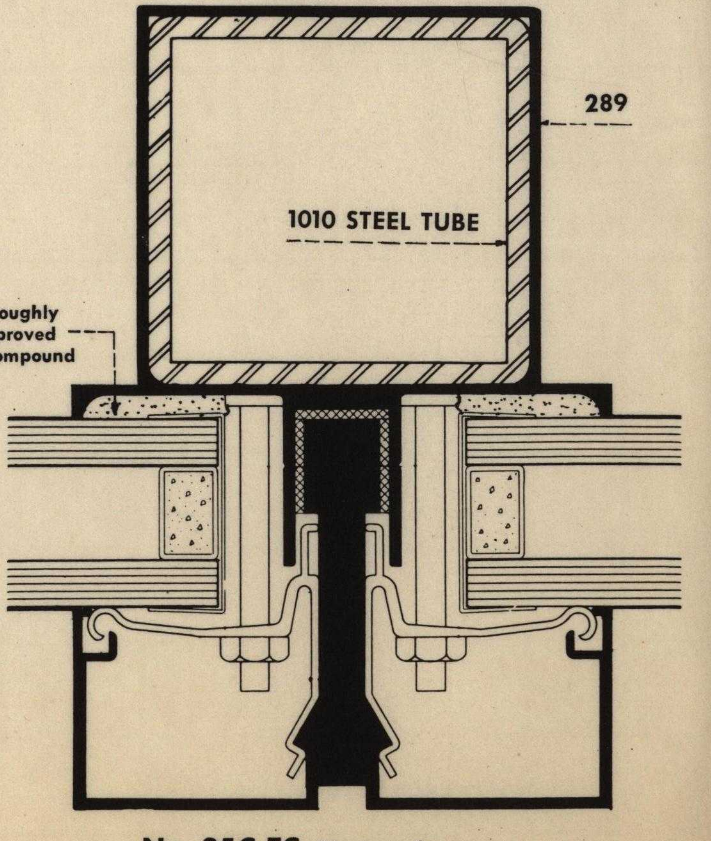
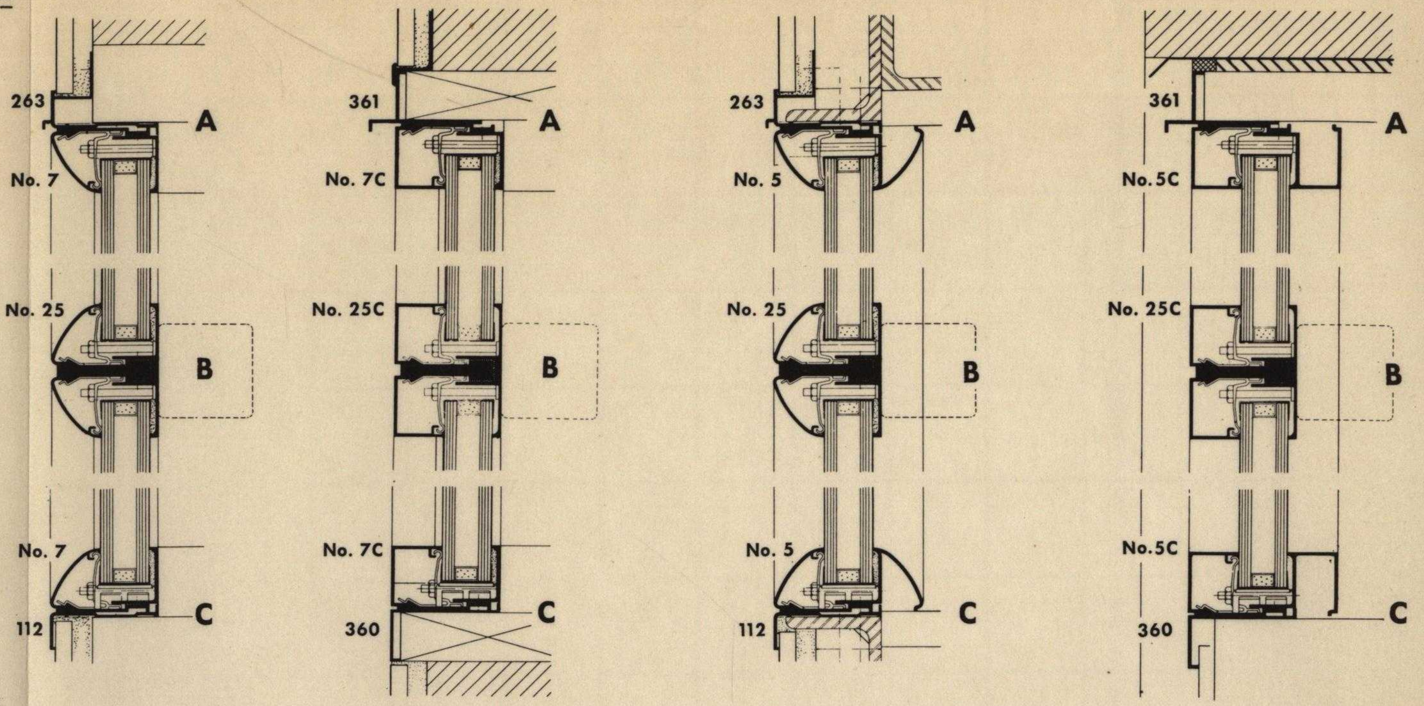
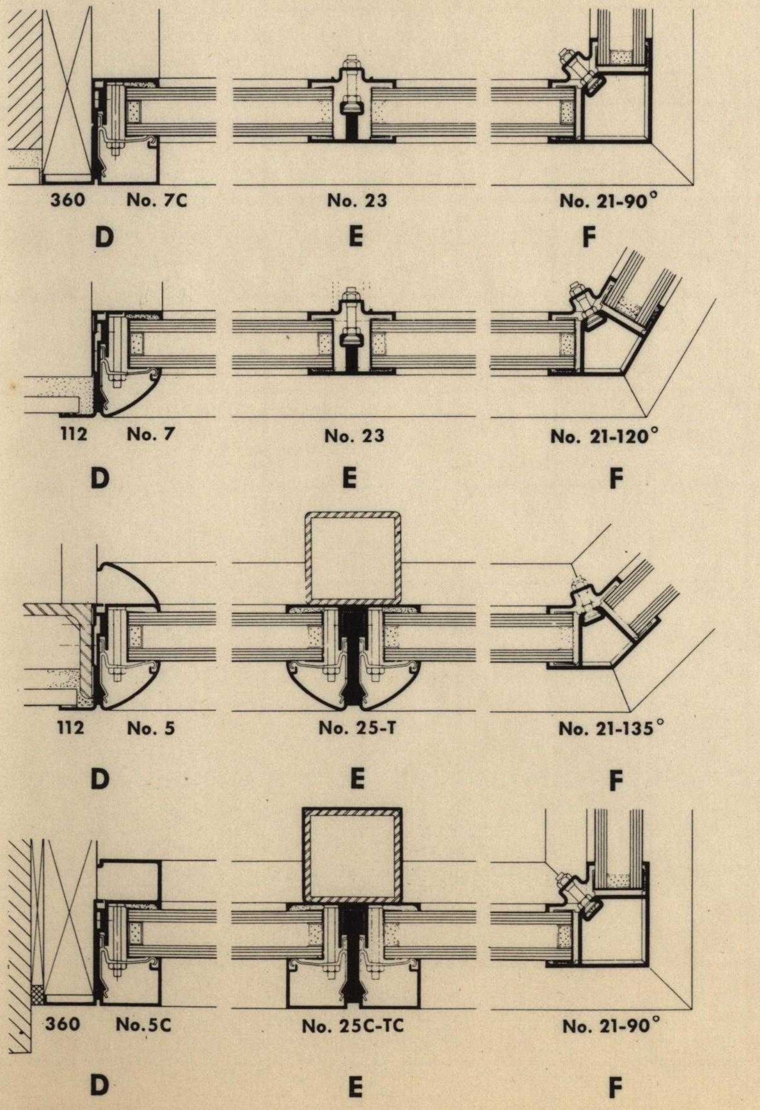


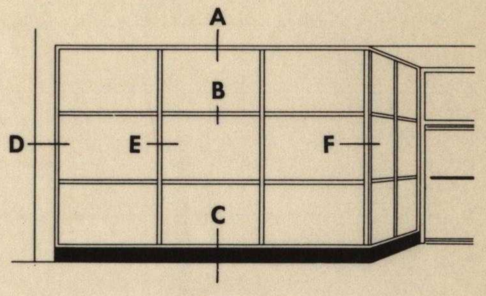
No. 25-TC Illustrated
No. 25-T No. 289 omitted
No. 25 Nos. 289 and 1010 omitted



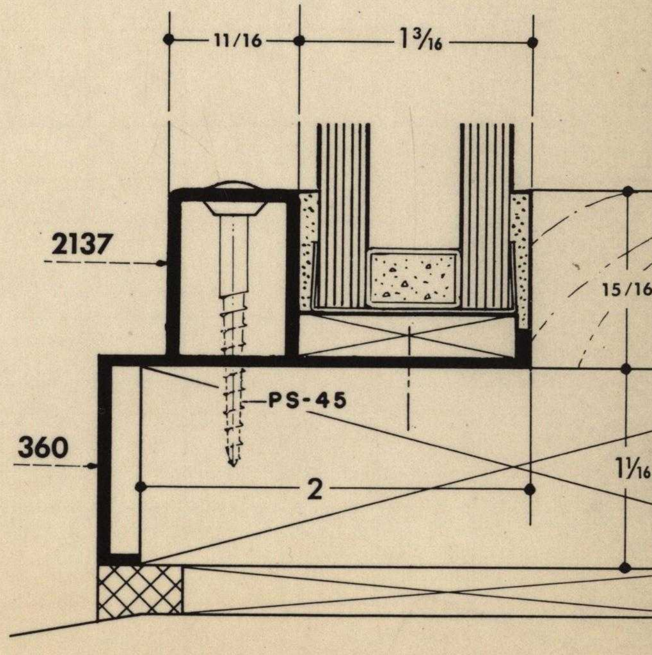
No. 25C-TC Illustrated
No. 25C-T No. 289 omitted
No. 25C Nos. 289 and 1010 omitted





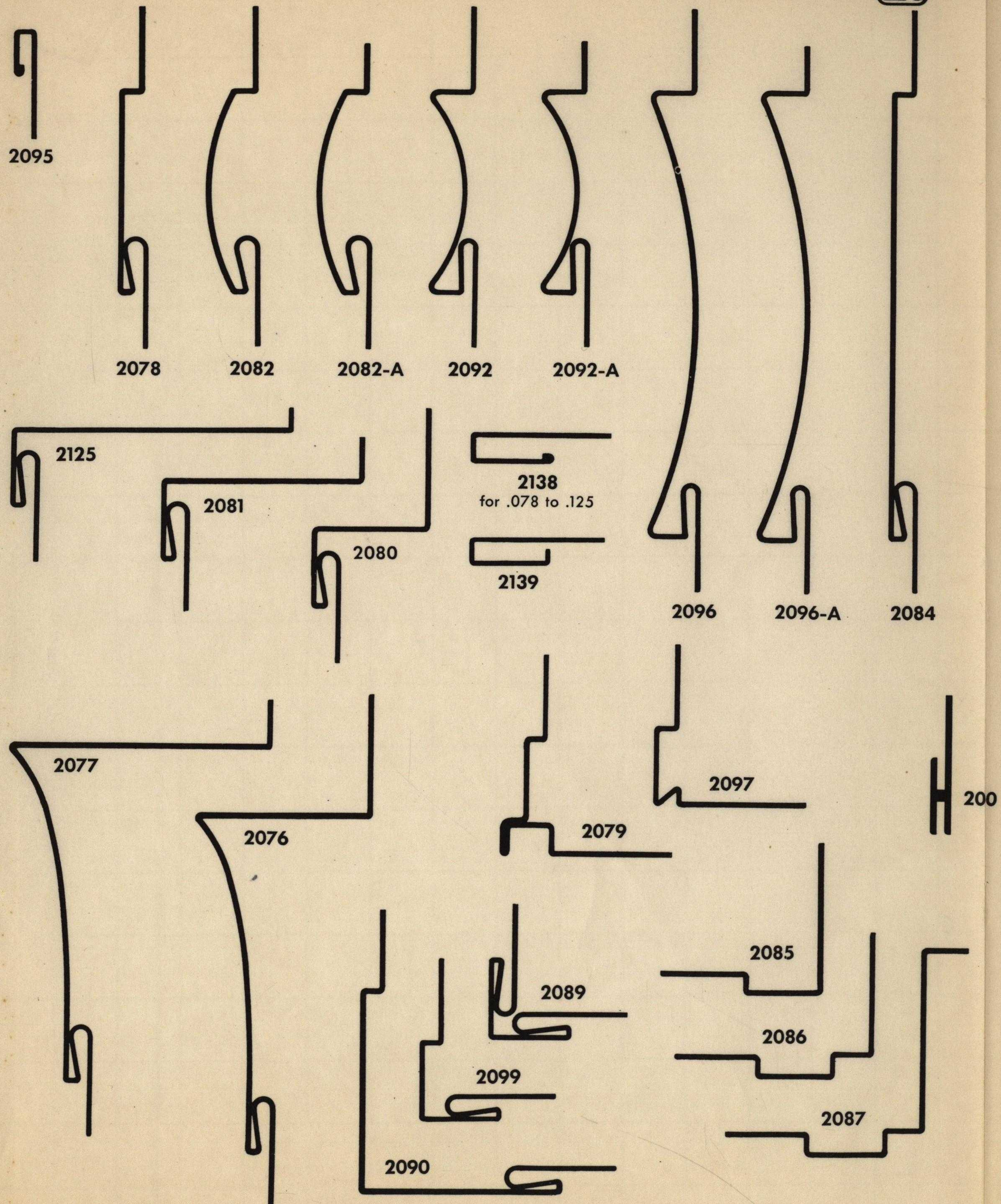


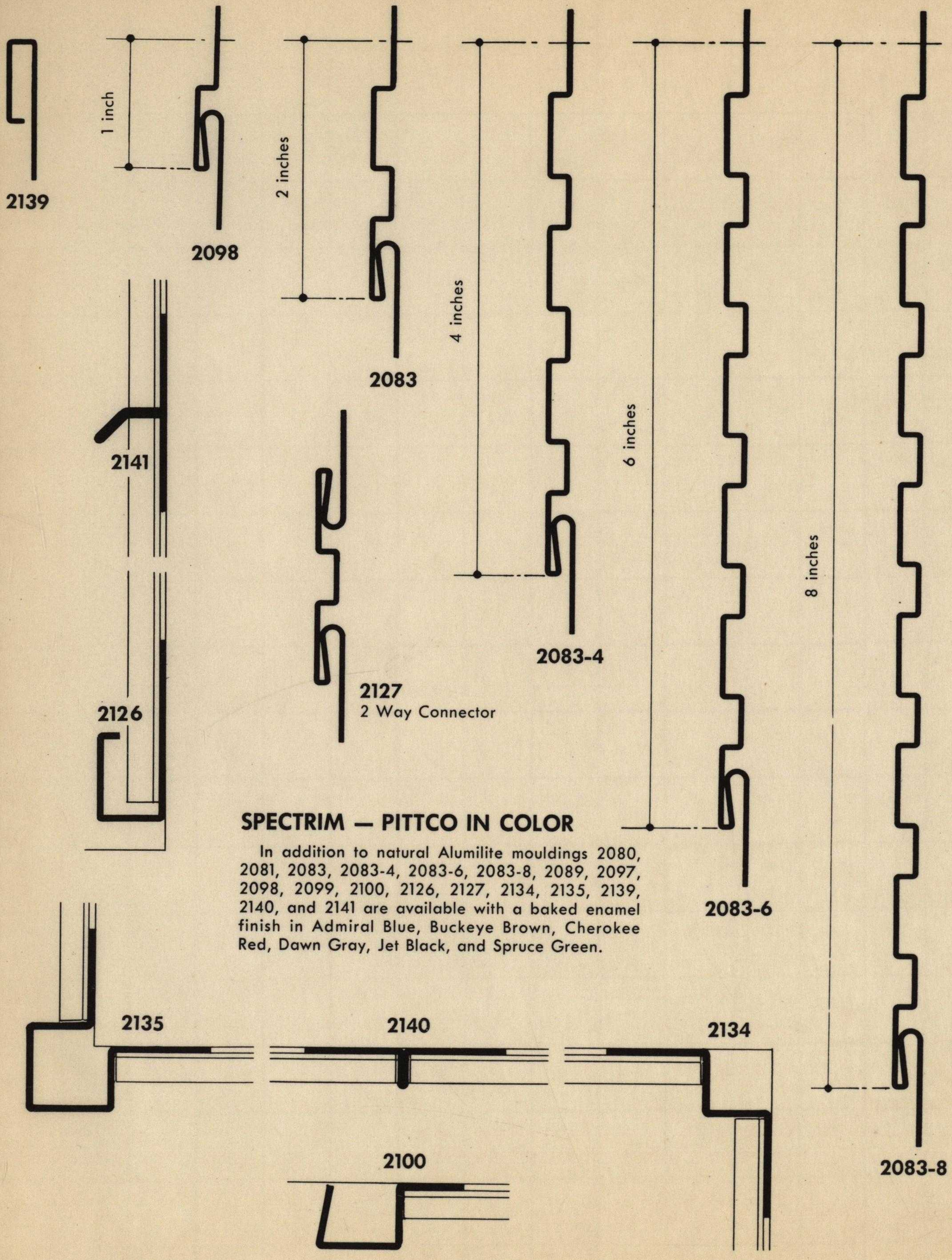
ELEVATION



FULL SIZE DETAIL
Twindow setting using No. 2137 stop

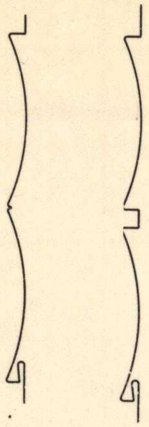
SCALE 3" = 1'-0"



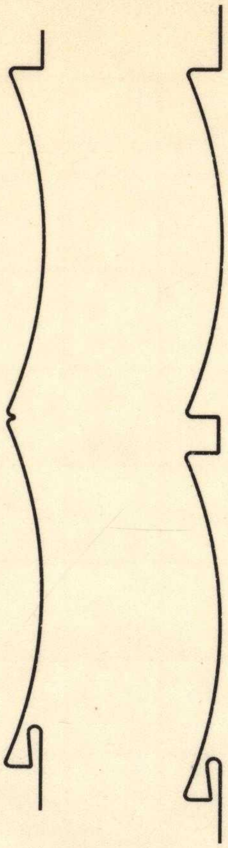


SPECTRIM — PITTCO IN COLOR

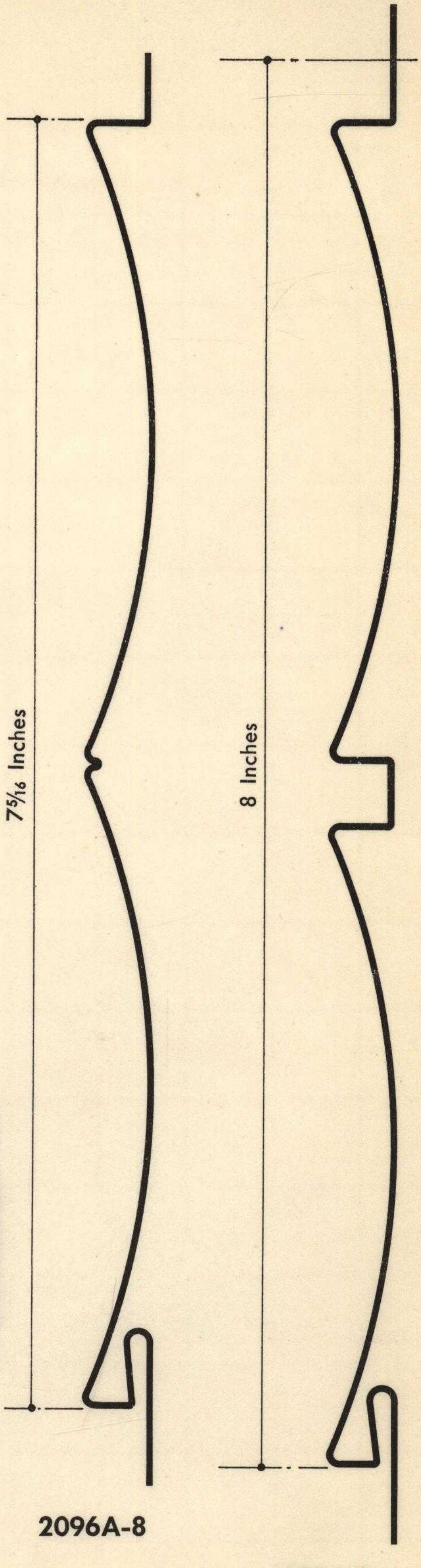
In addition to natural Alumilite mouldings 2080, 2081, 2083, 2083-4, 2083-6, 2083-8, 2089, 2097, 2098, 2099, 2100, 2126, 2127, 2134, 2135, 2139, 2140, and 2141 are available with a baked enamel finish in Admiral Blue, Buckeye Brown, Cherokee Red, Dawn Gray, Jet Black, and Spruce Green.



Quarter Size



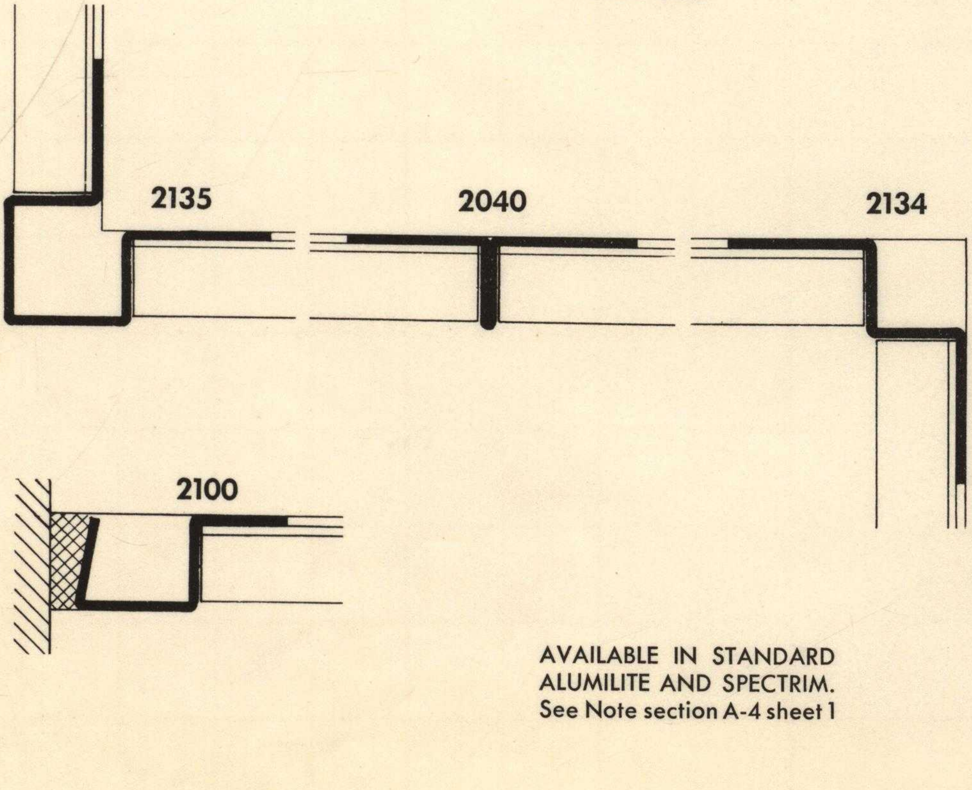
Half Size



2096A-8

2096-8

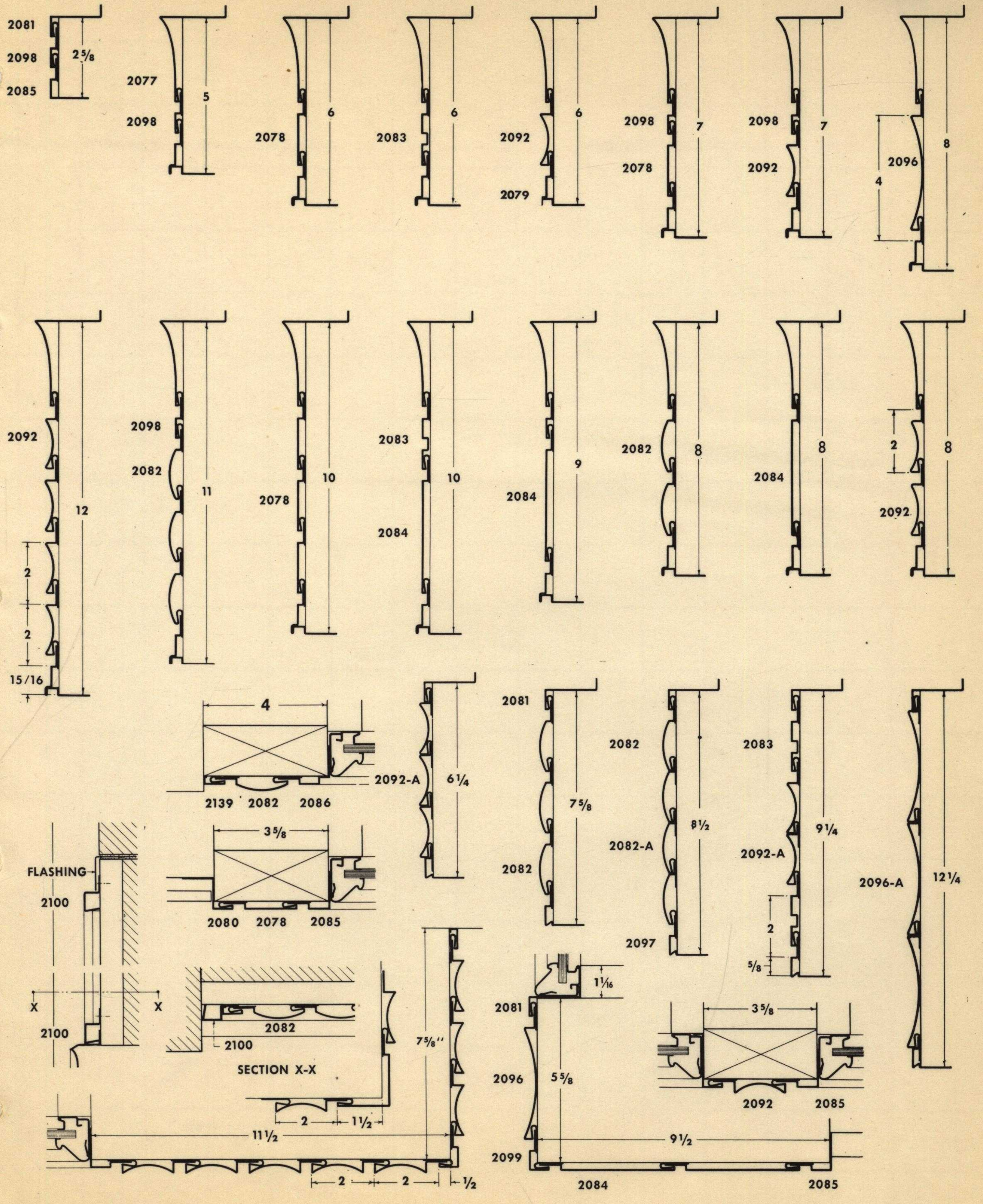
Full Size



AVAILABLE IN STANDARD ALUMILITE AND SPECTRIM.
See Note section A-4 sheet 1

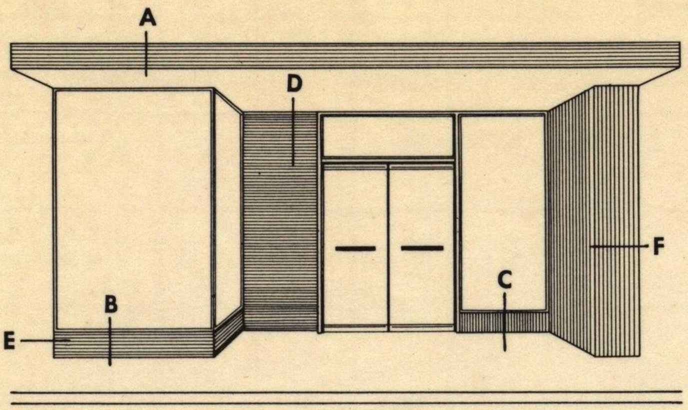
FACING MOULDINGS Rolled

PITTSBURGH PLATE GLASS CO.
PRINTED IN U.S.A. COPYRIGHT 1954

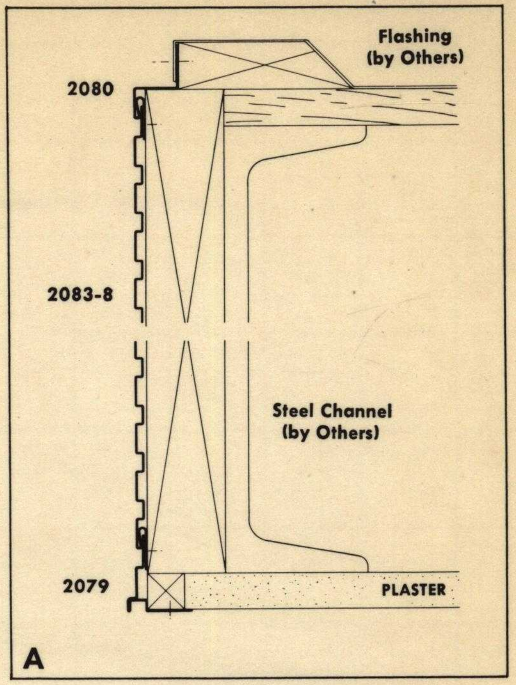


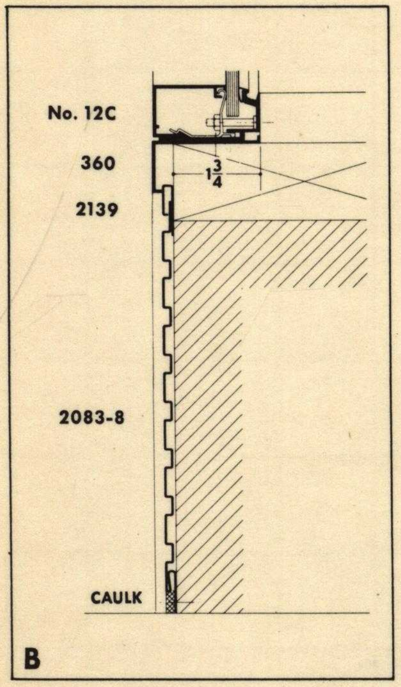
TYPICAL DETAILS

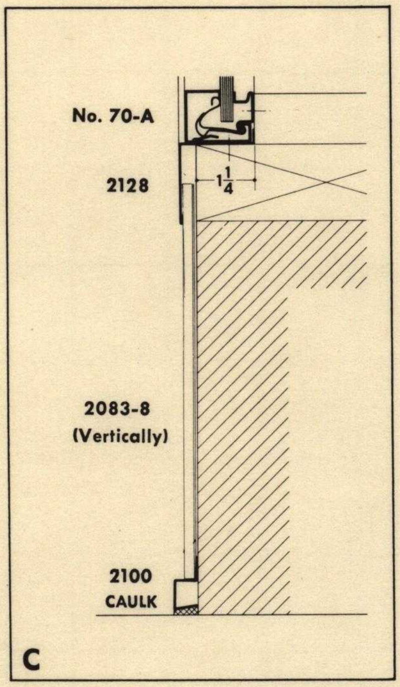
SCALE 3'' = 1'-0''

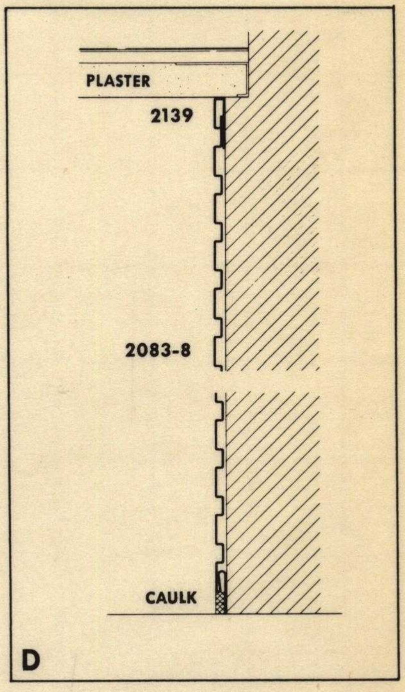


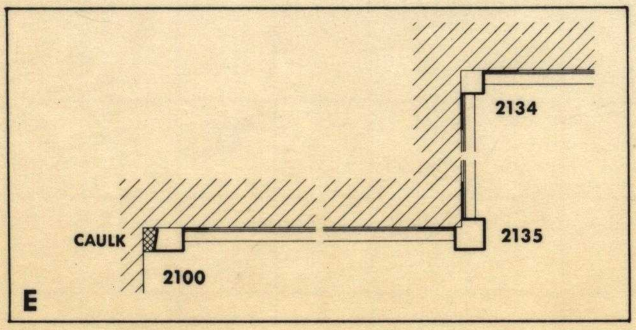
ELEVATION
Showing typical applications

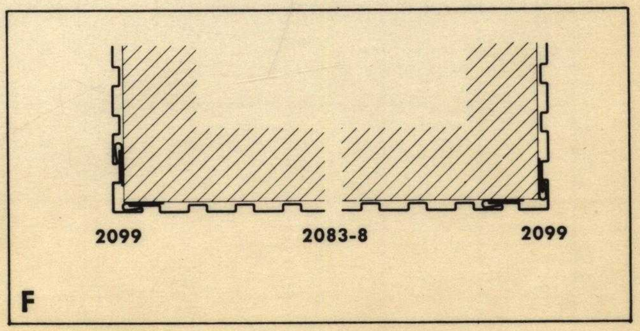






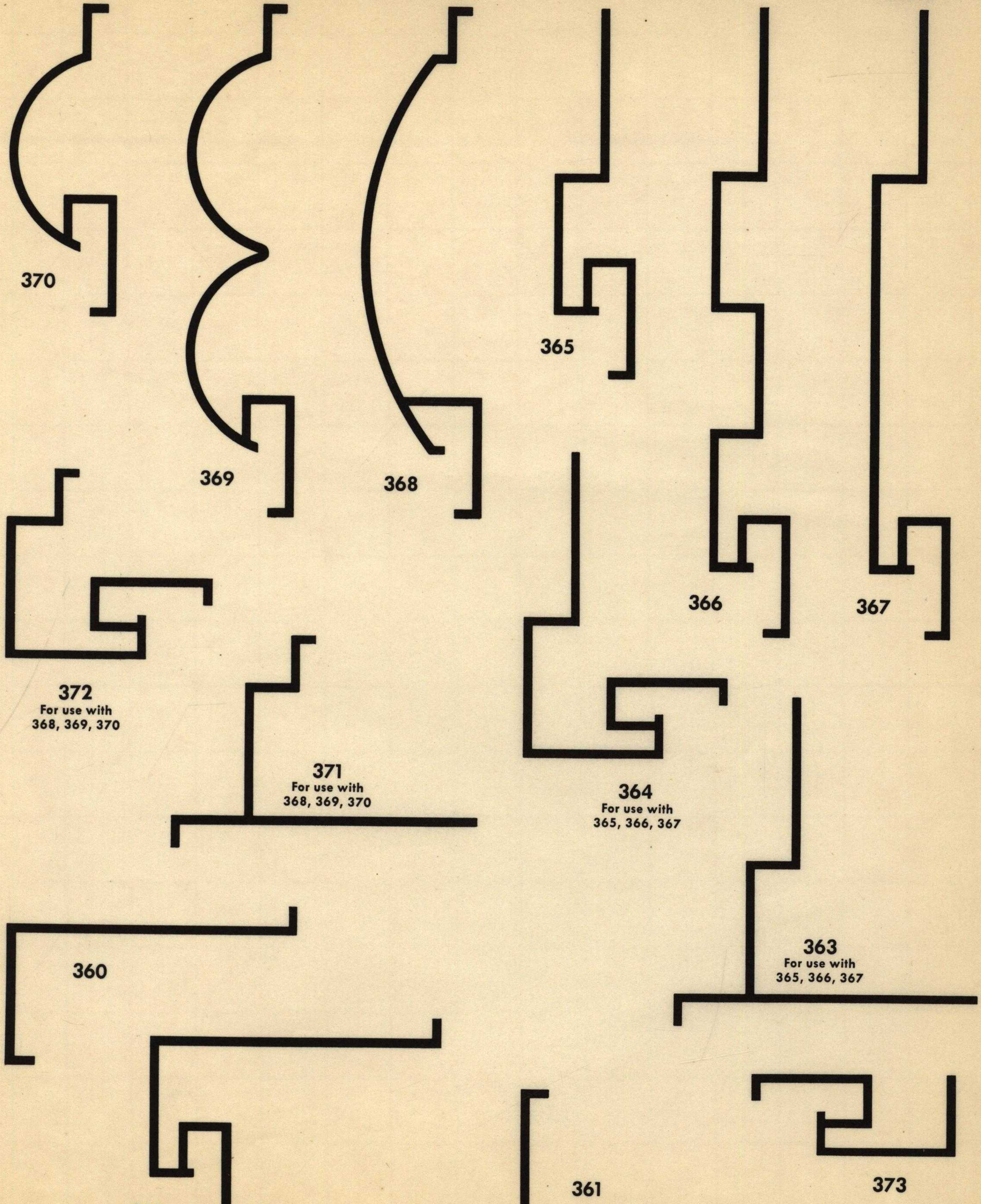






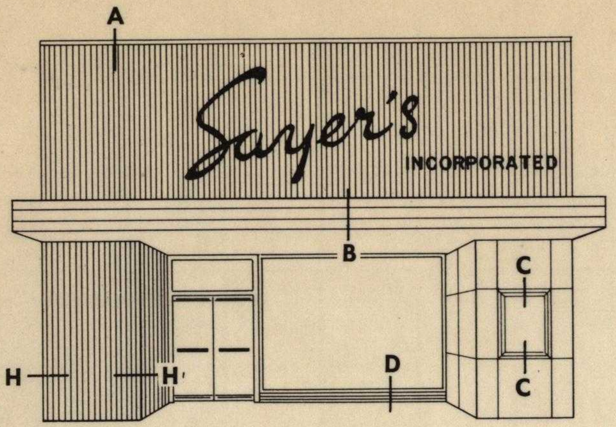
TYPICAL DETAILS

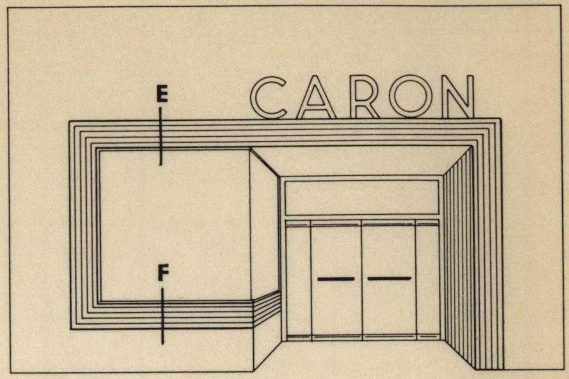
SCALE 3" = 1'-0"

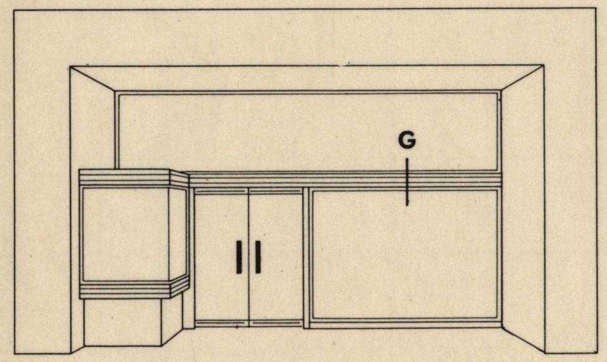


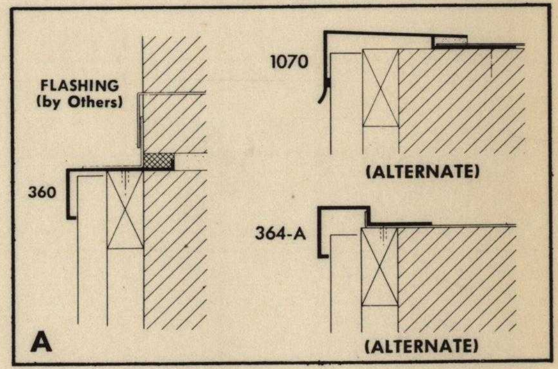
FACING MOULDINGS Extruded

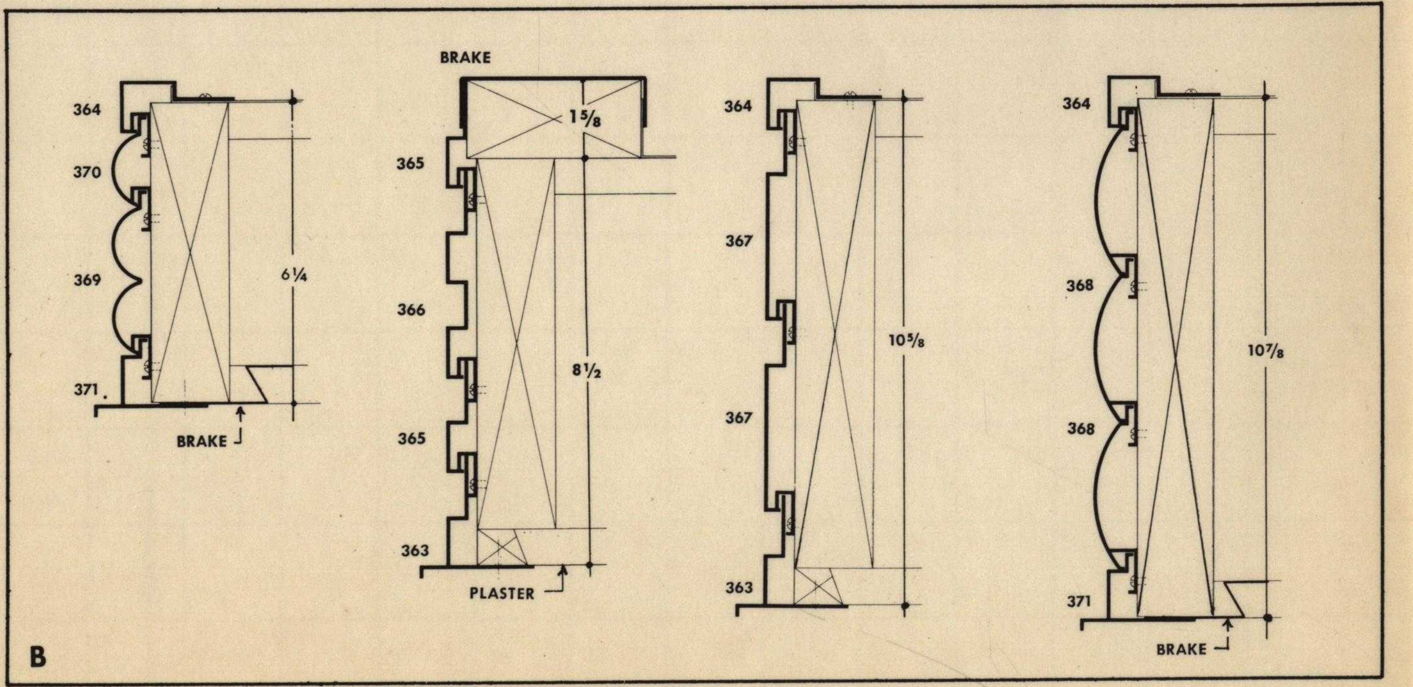
FULL SIZE SECTIONS

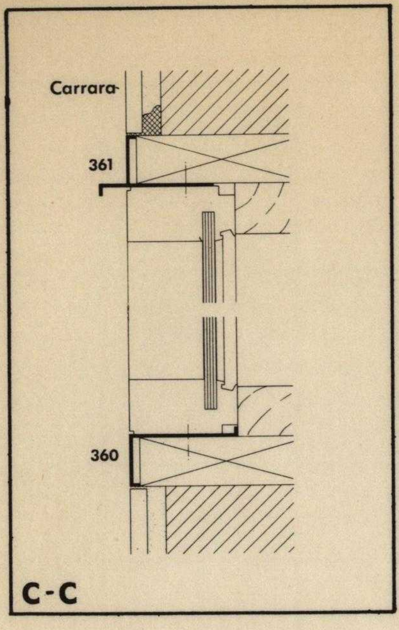


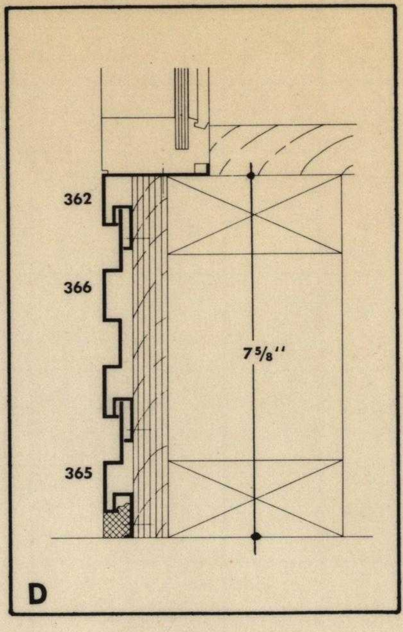


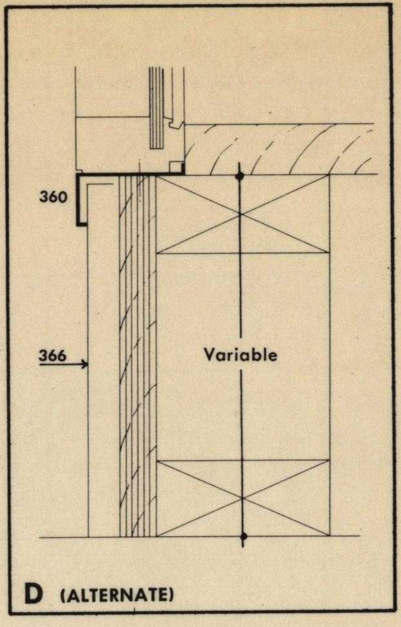


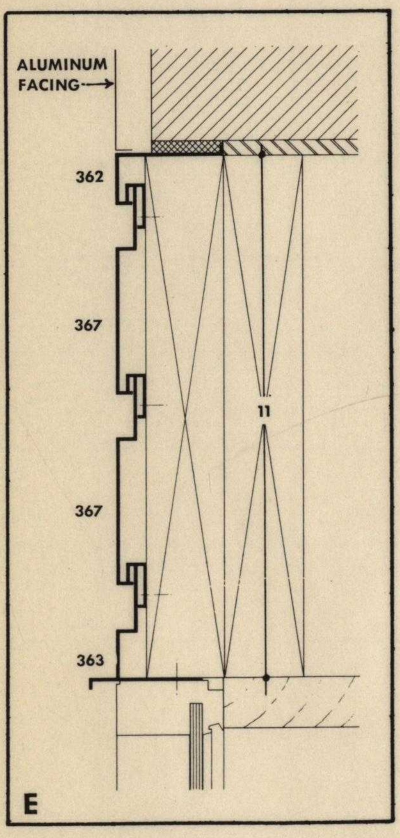


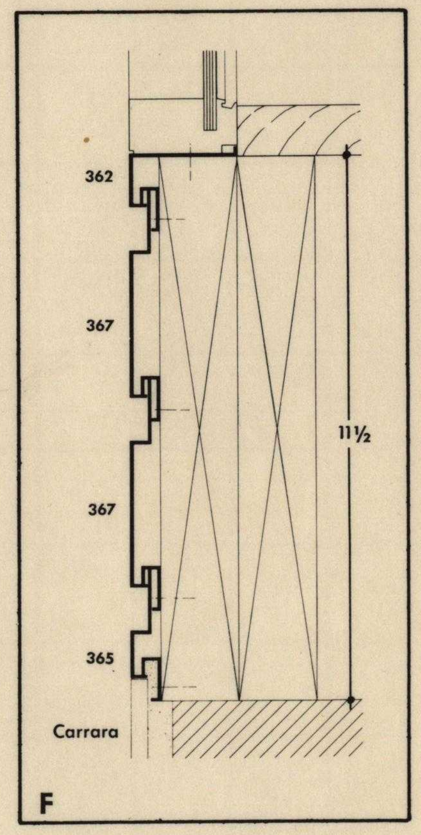


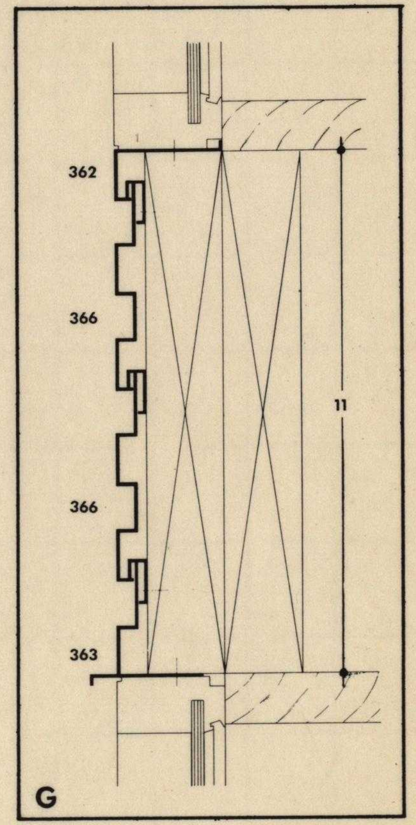


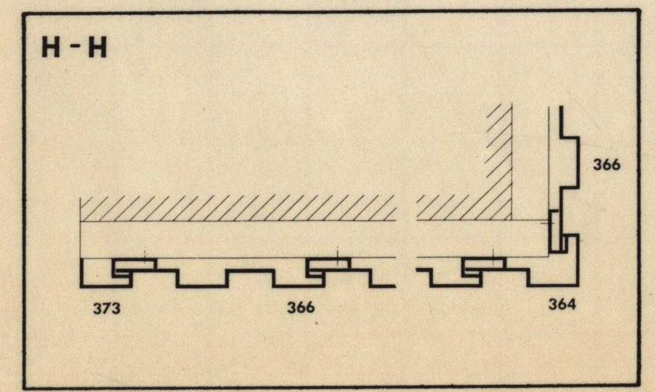


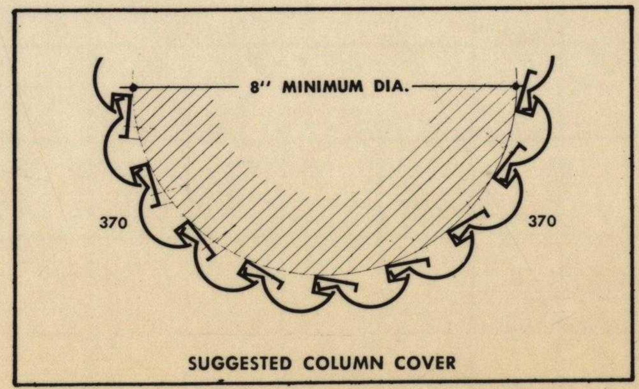






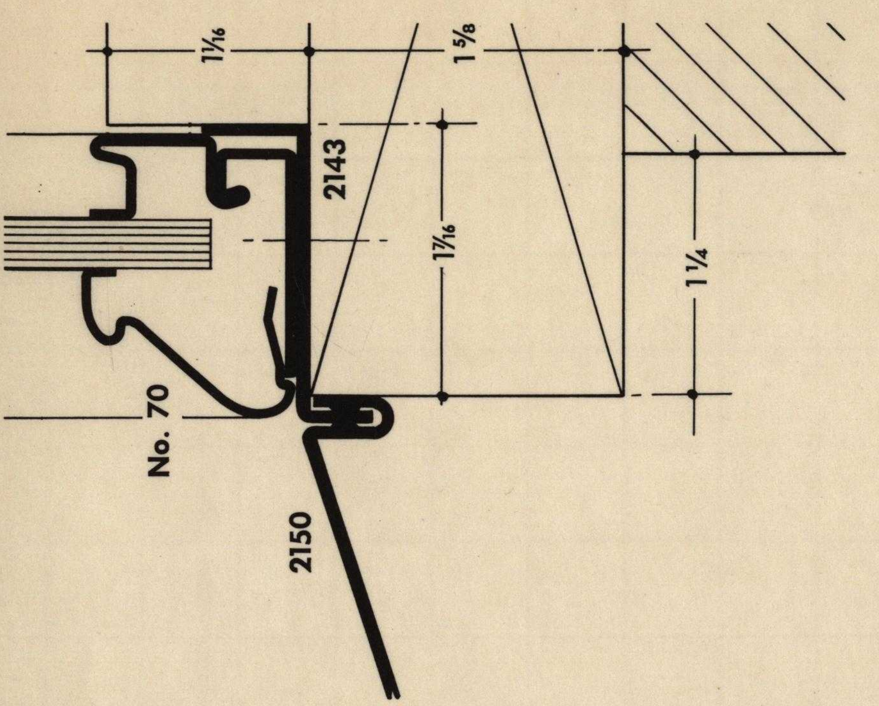


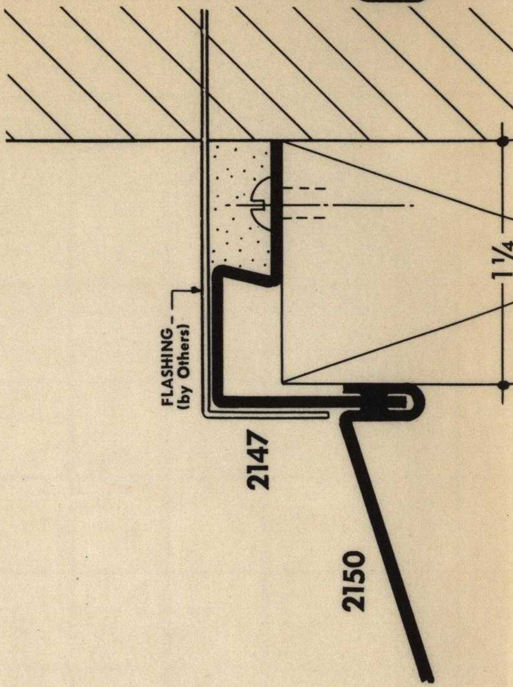


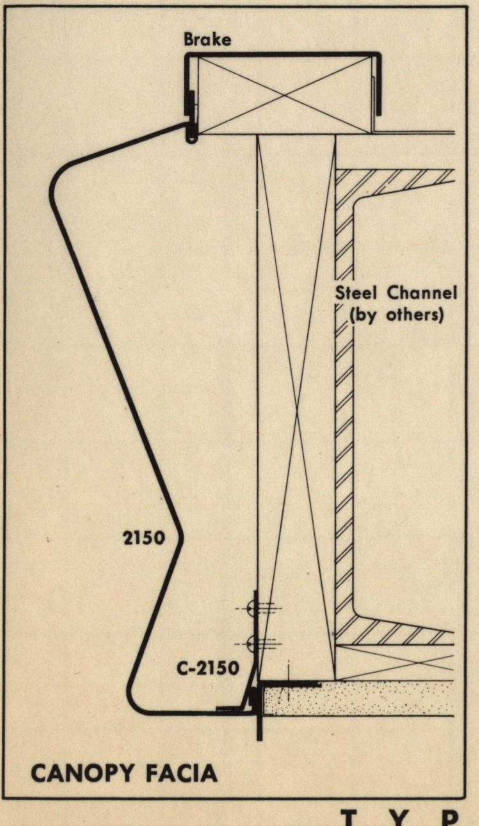


TYPICAL DETAILS

SCALE 3″=1′-0″







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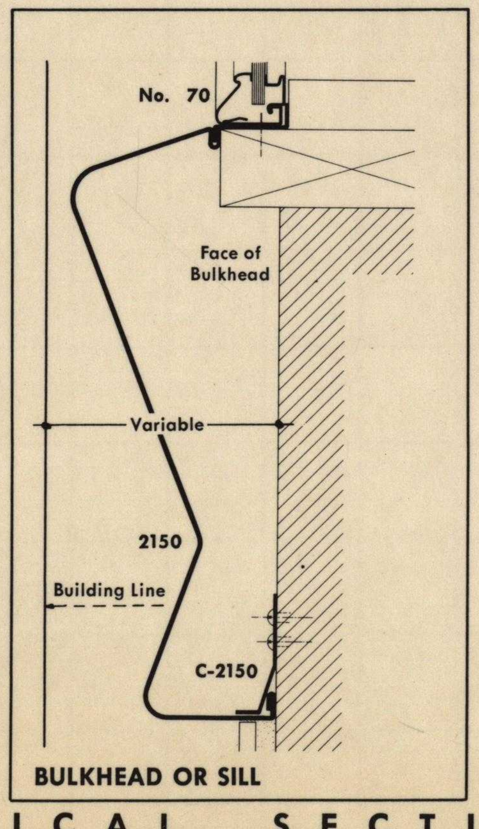
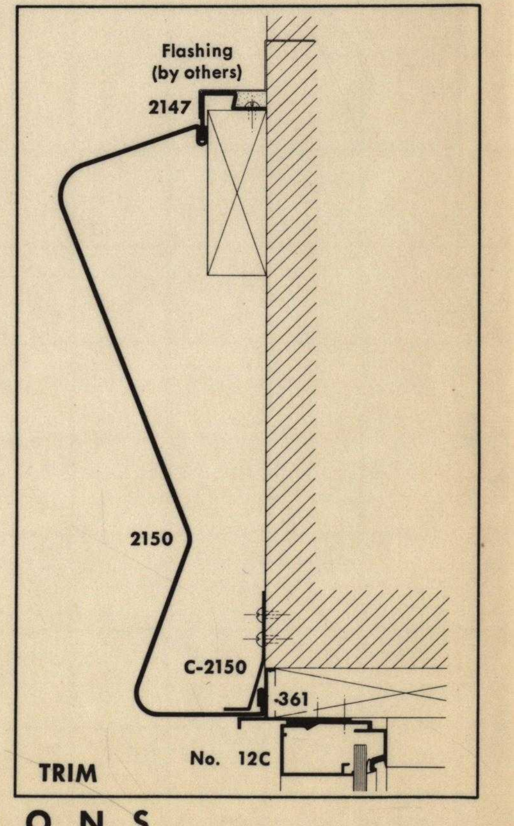


BULKHEAD OR SILL



TRIM

TYPICAL SECTIONS

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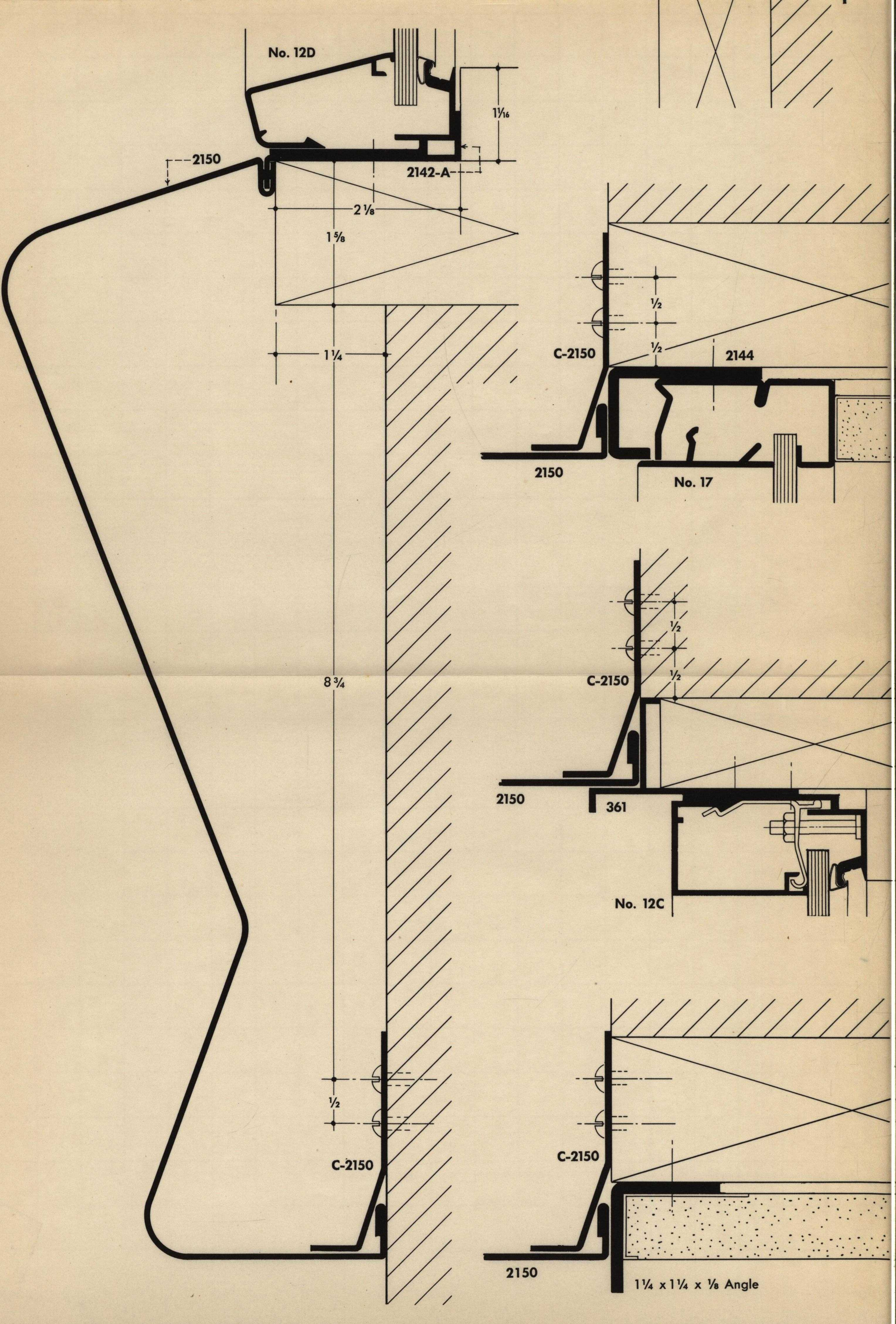
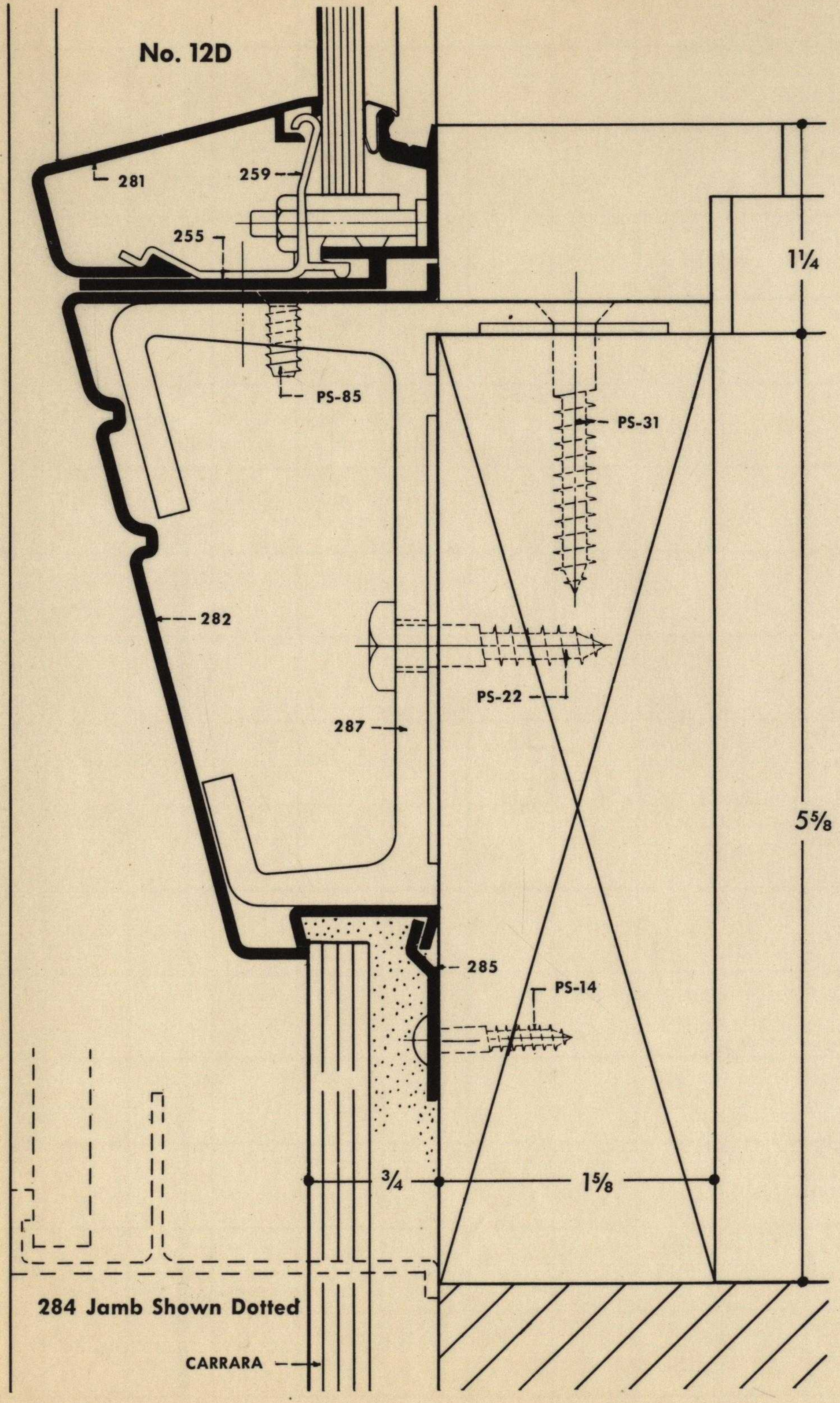
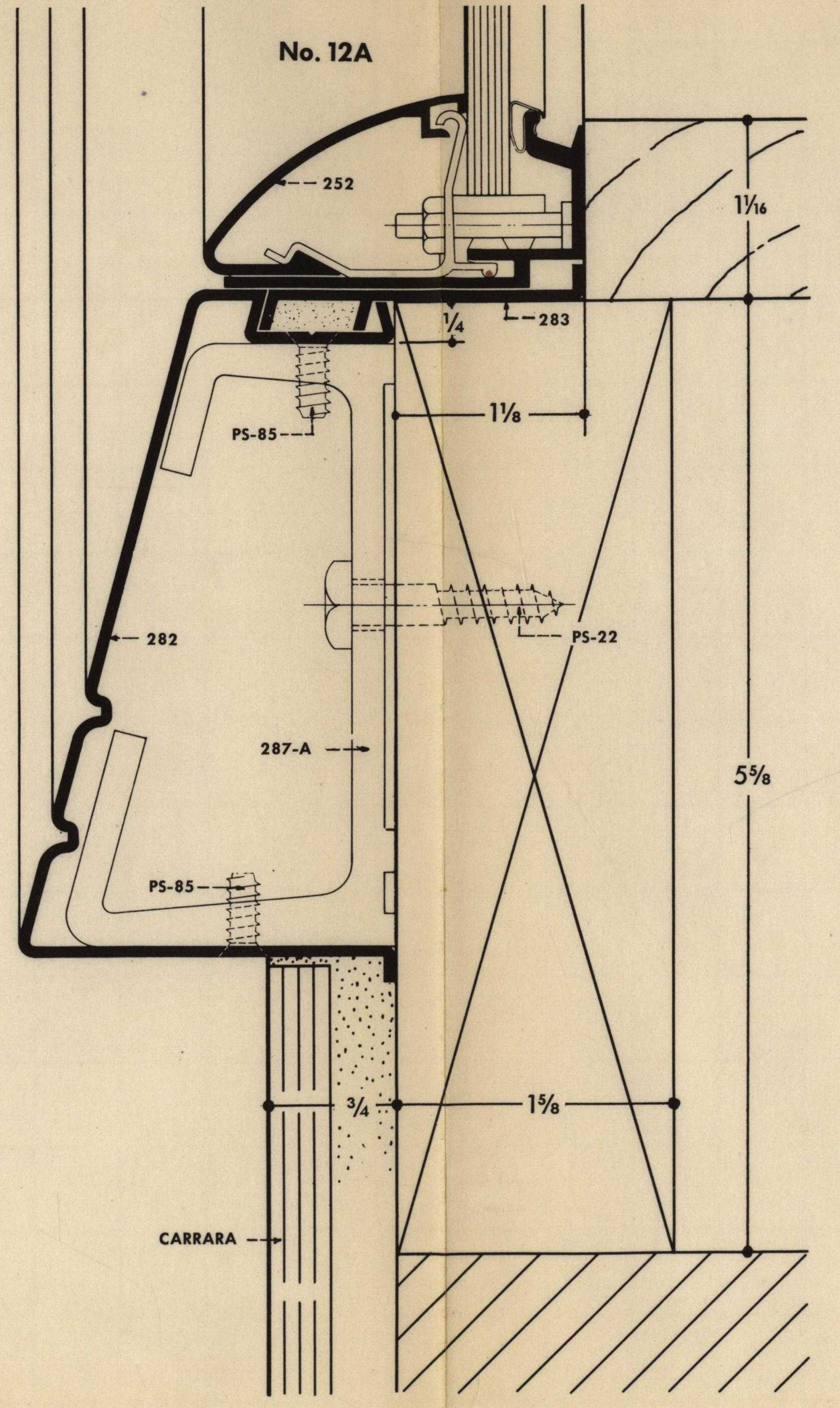
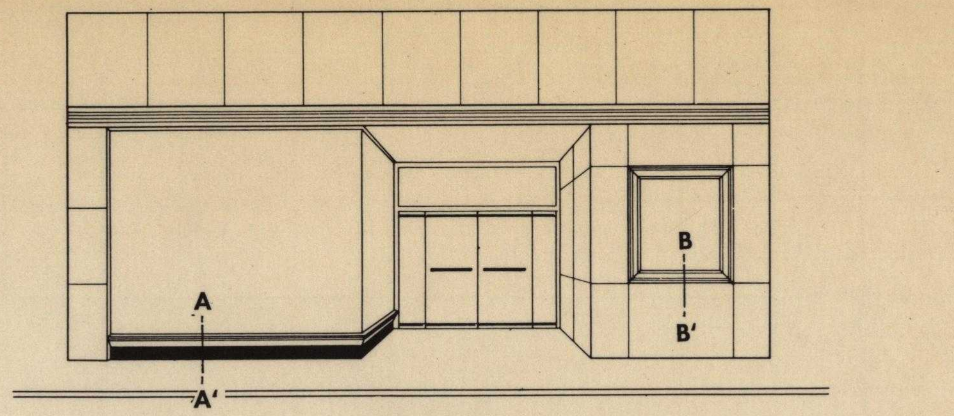

No. 12D
1¹⁄₁₆
2150
2142-A
2 ⅛
1 ⅝
1 ¼
8 ¾
½
C-2150
C-2150
½
½
2144
2150
No. 17
½
½
C-2150
2150
361
No. 12C
C-2150
2150
1¼ x 1¼ x ⅛ Angle



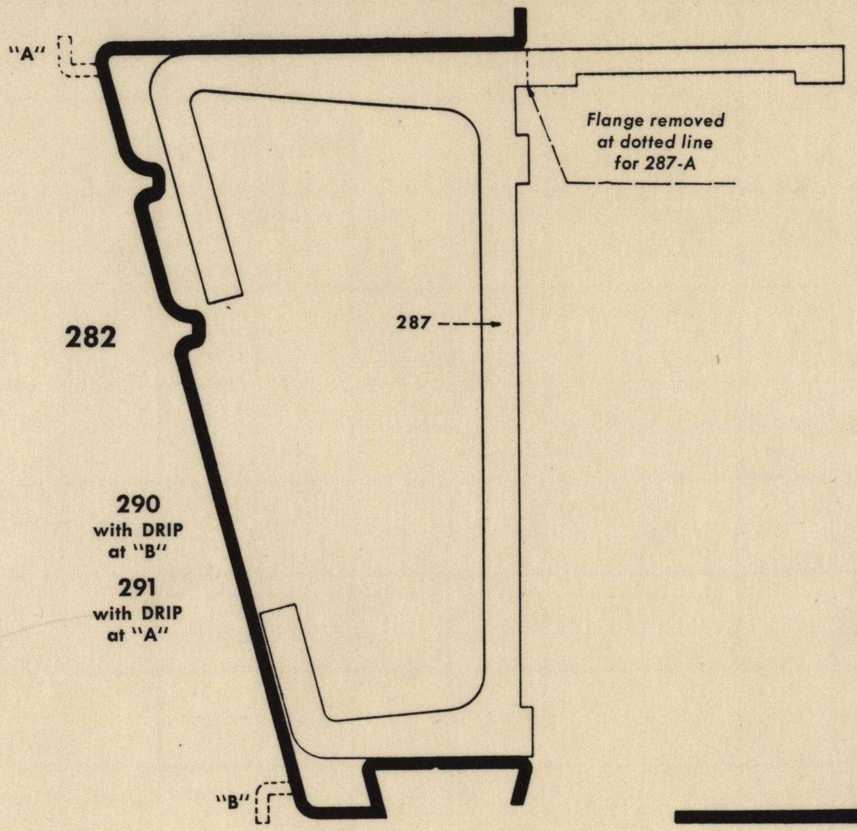
A-A′

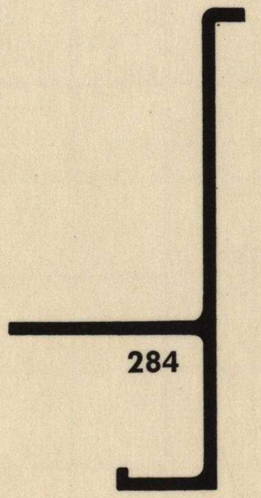


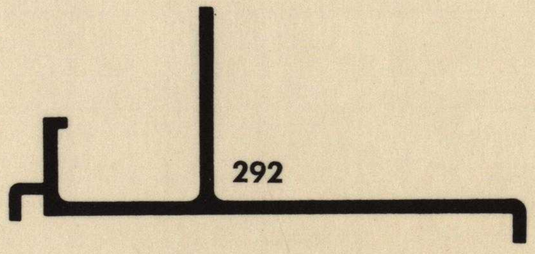
B-B′

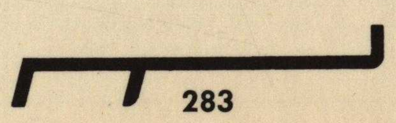


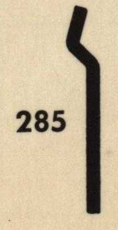
ELEVATION

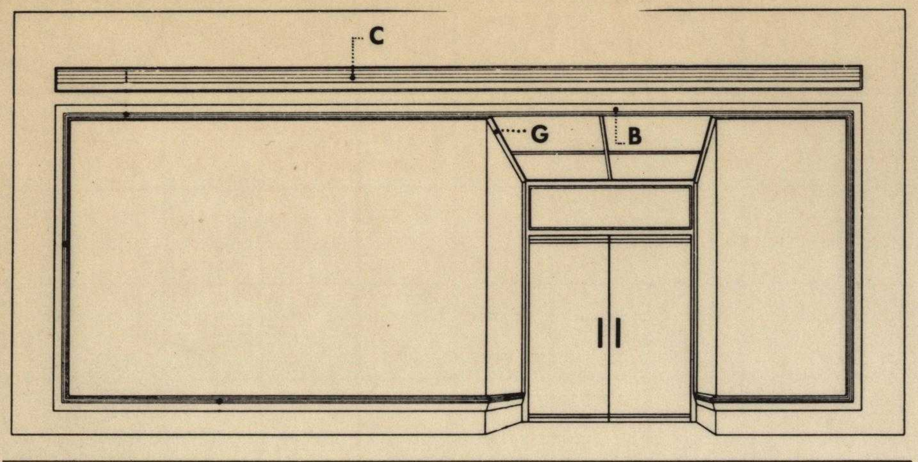


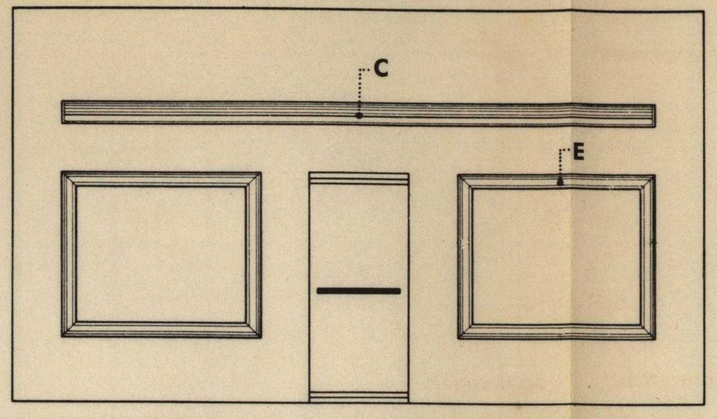


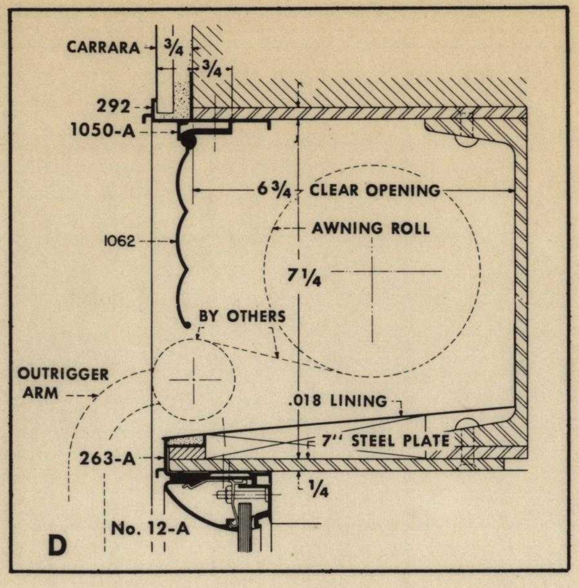


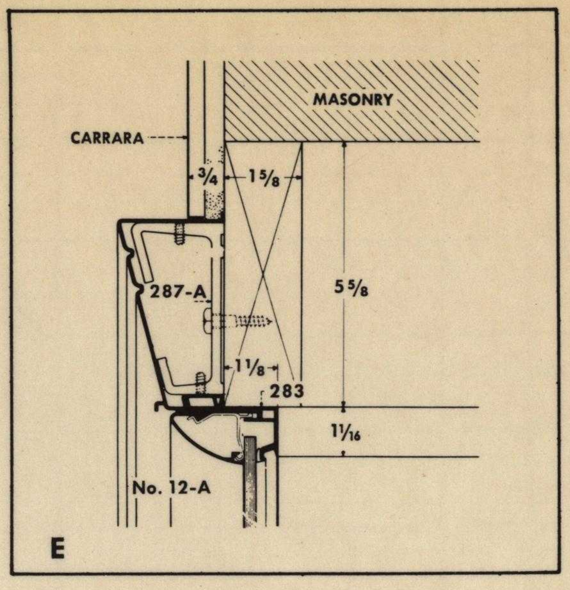


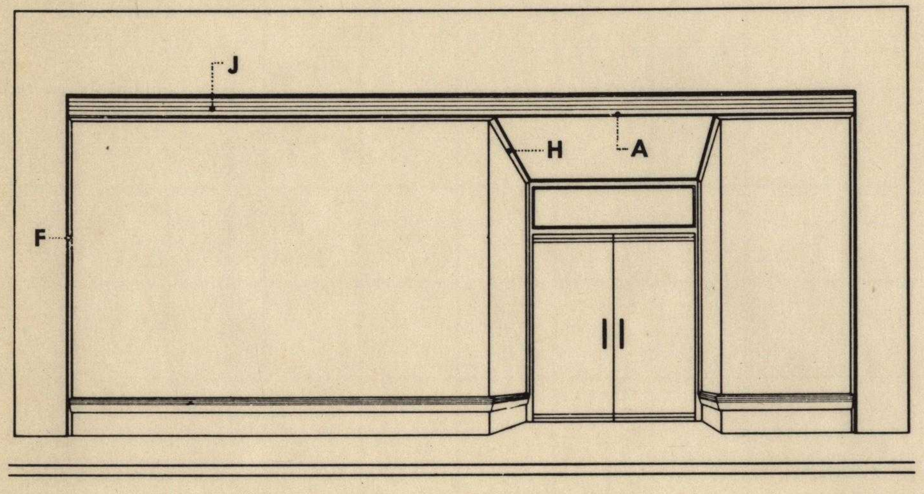


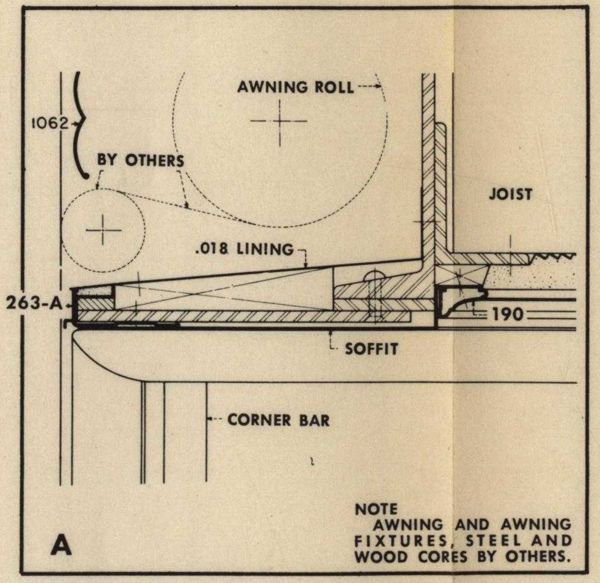




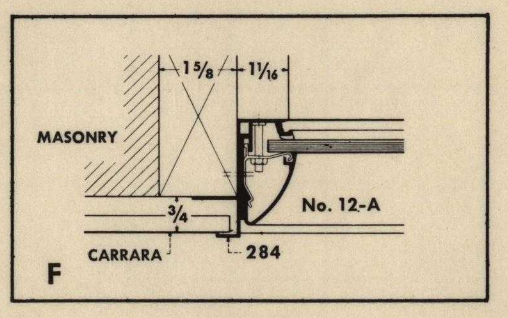


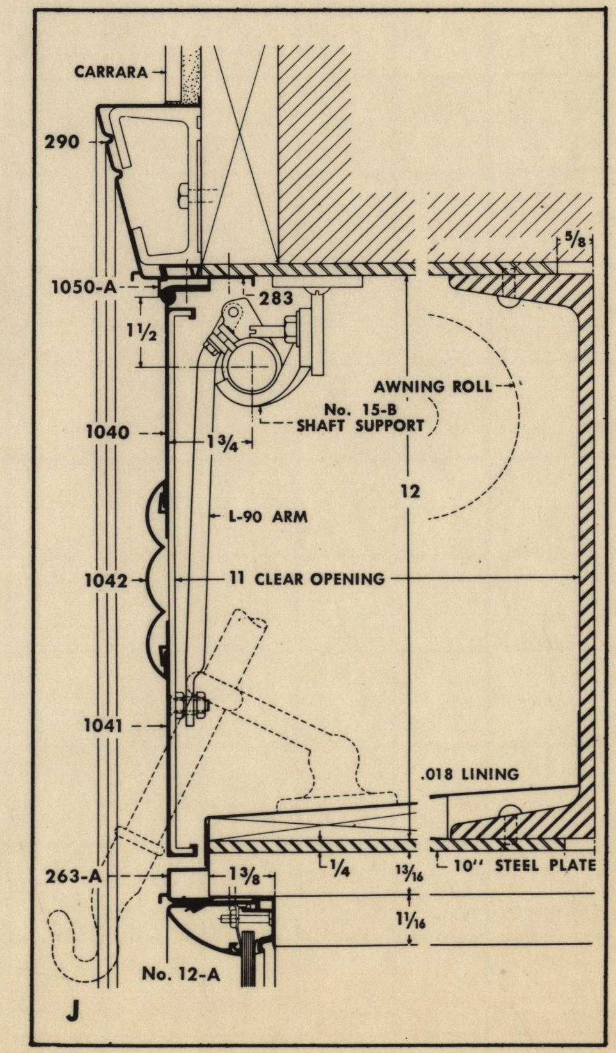


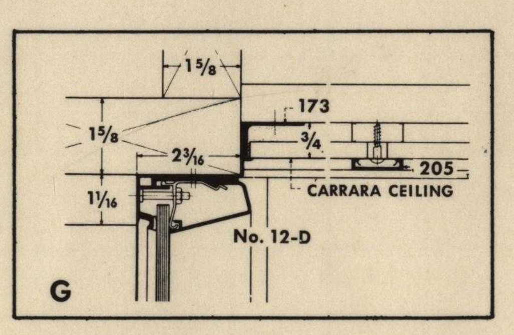


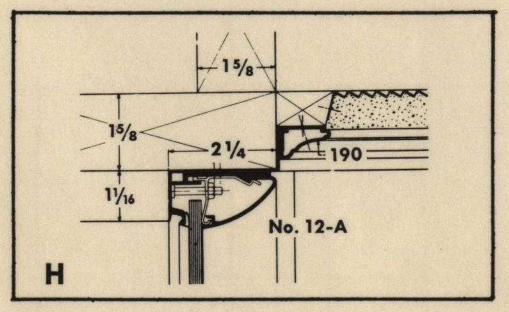


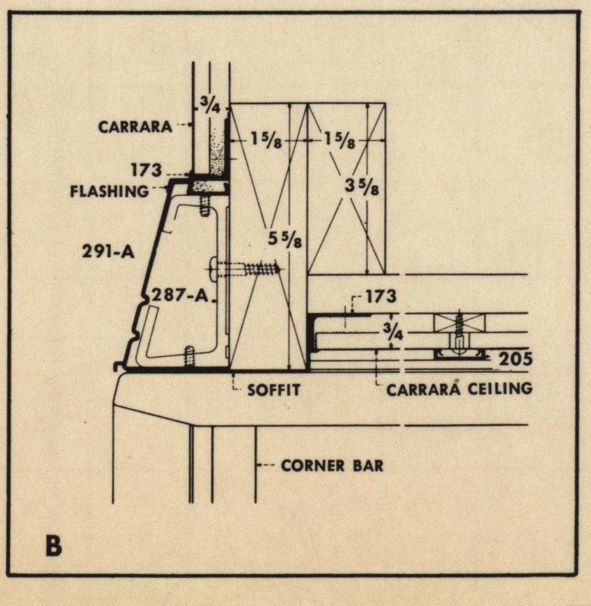
NOTE
AWNING AND AWNING FIXTURES, STEEL AND WOOD CORES BY OTHERS.

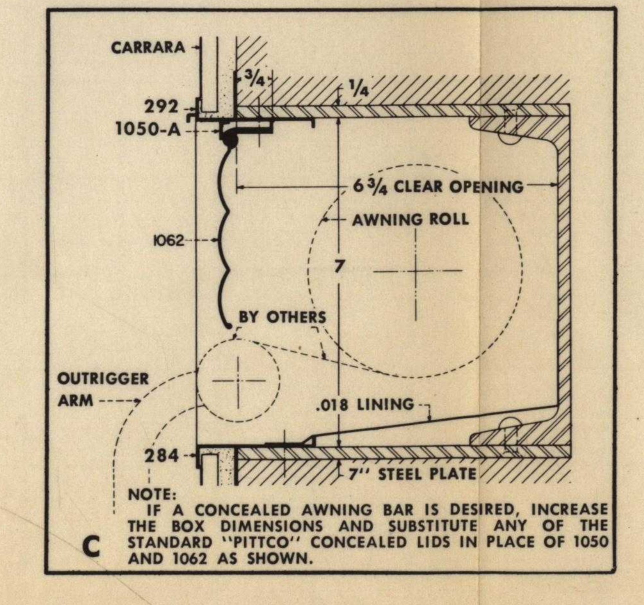




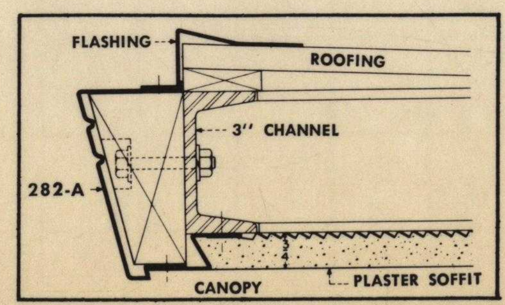






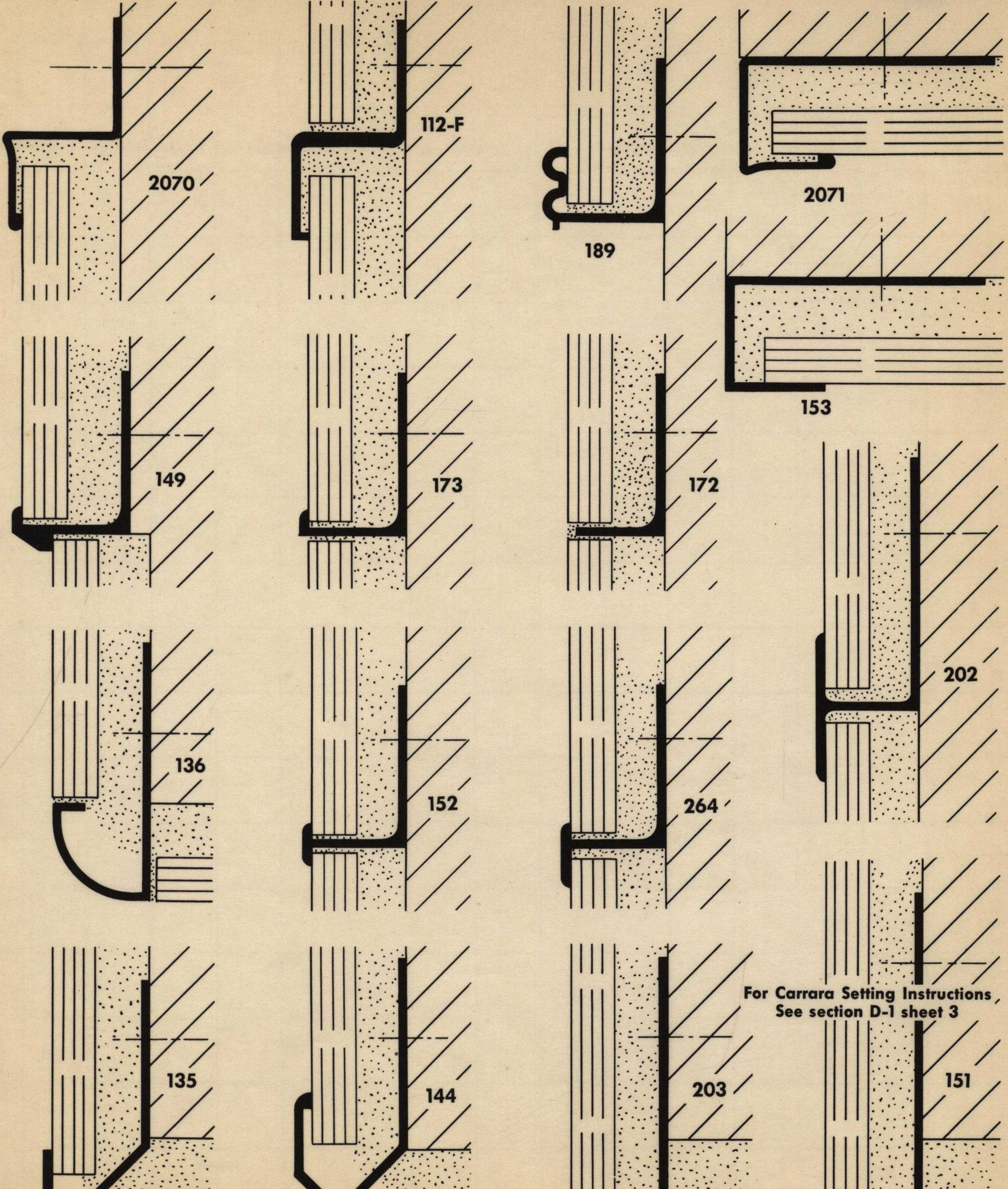


NOTE:
IF A CONCEALED AWNING BAR IS DESIRED, INCREASE THE BOX DIMENSIONS AND SUBSTITUTE ANY OF THE STANDARD "PITTCO" CONCEALED LIDS IN PLACE OF 1050 AND 1062 AS SHOWN.



TYPICAL DETAILS

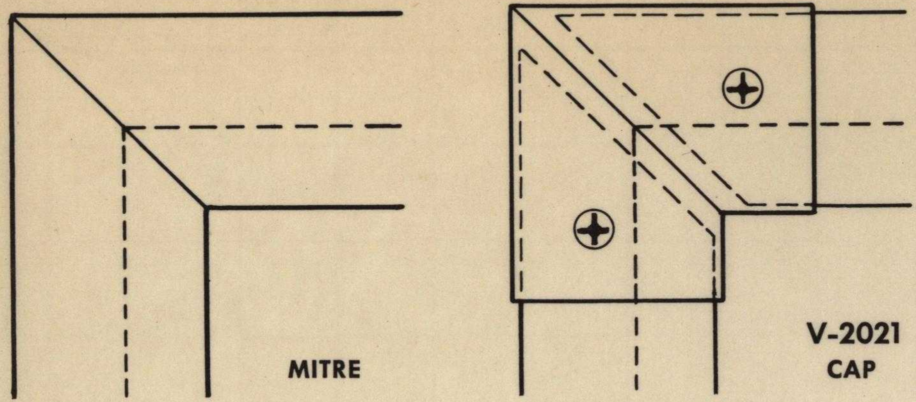
SCALE 3" = 1'-0"



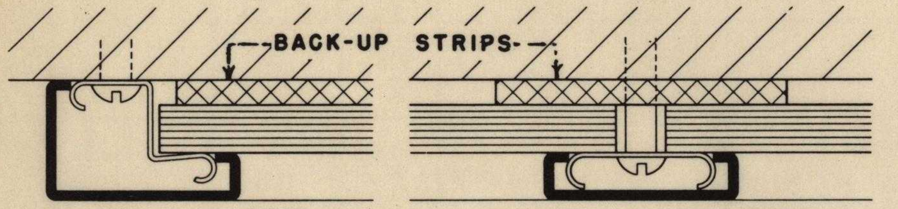
For Carrara Setting Instructions
See section D-1 sheet 3

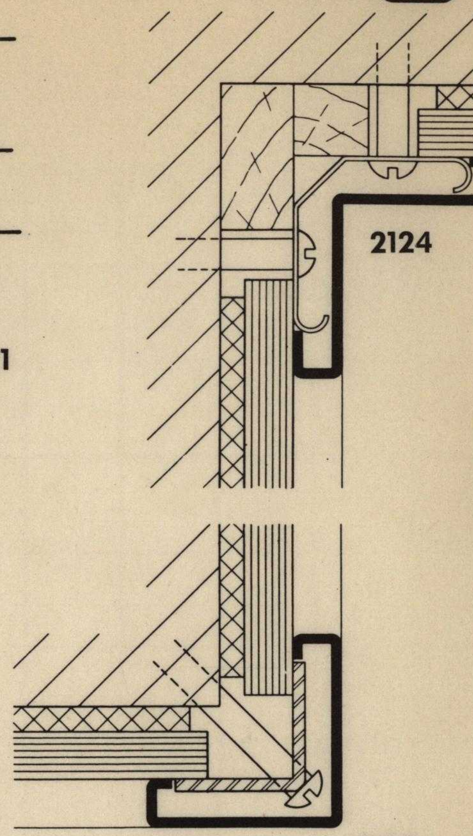
CARRARA SUPPORTING MOULDINGS

FULL SIZE SECTIONS

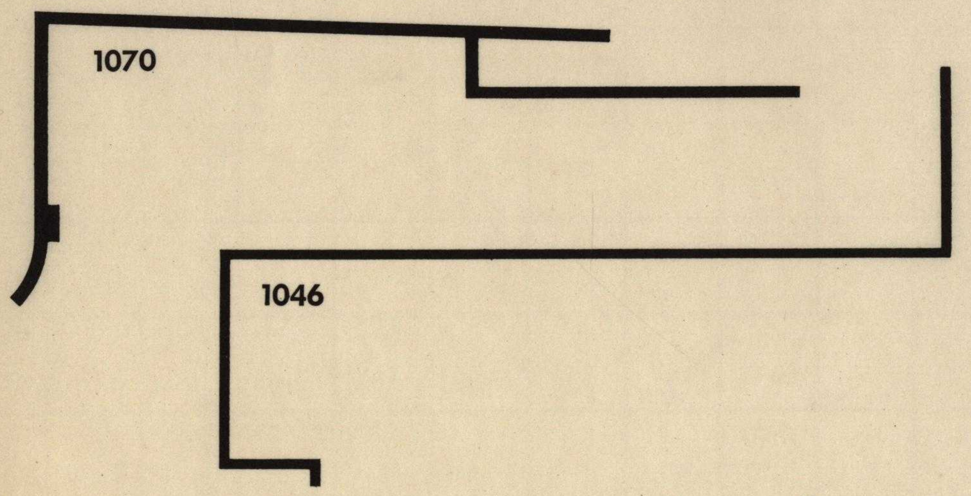


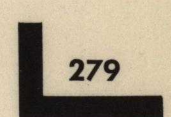
2 METHODS OF FINISHING 2021 CORNERS





SNAP-ONS USED WITH MIRRORS

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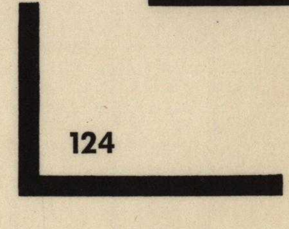
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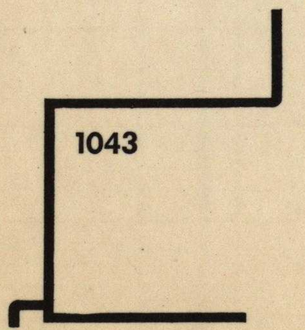
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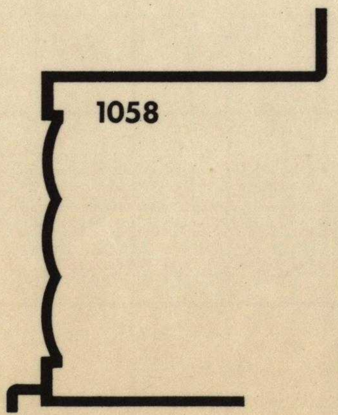
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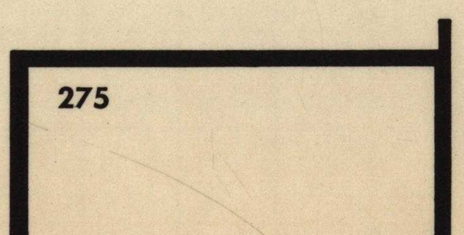
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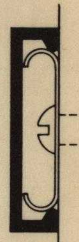
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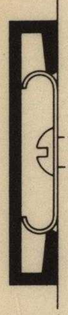
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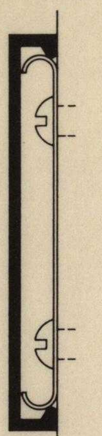
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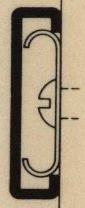
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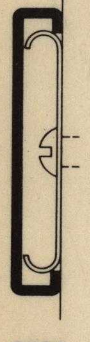
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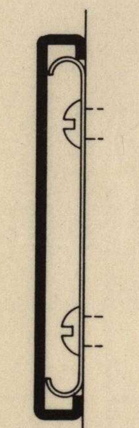
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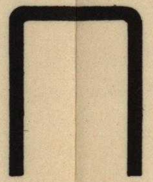
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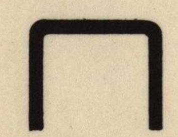
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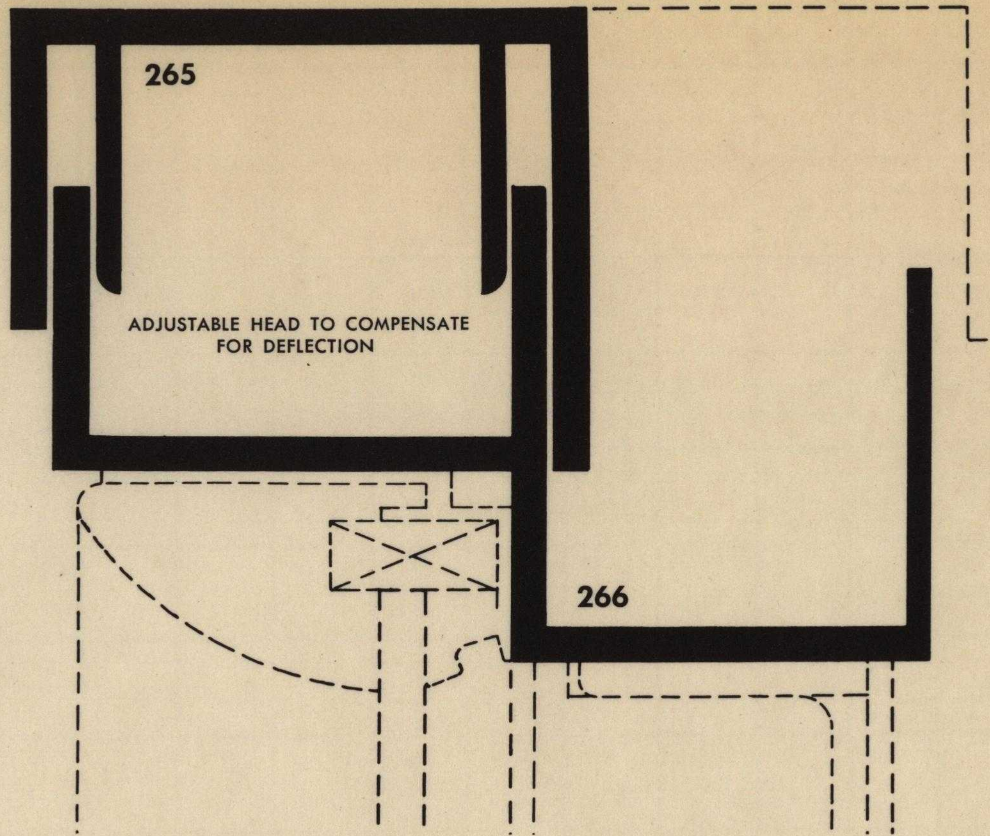

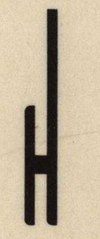
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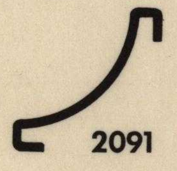
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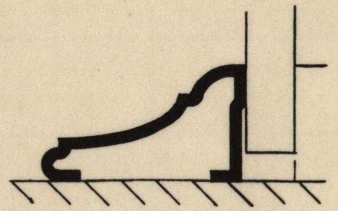
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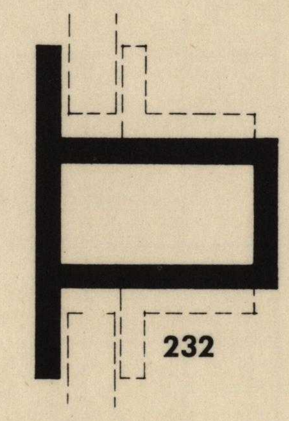
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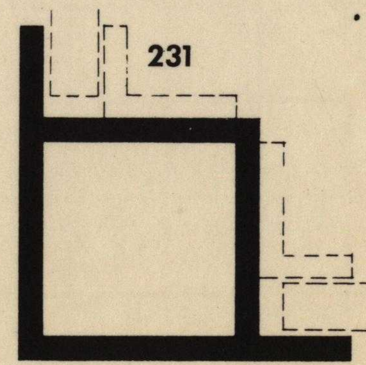
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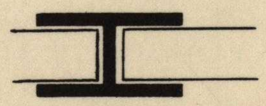
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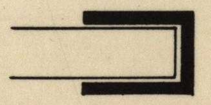
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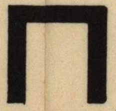
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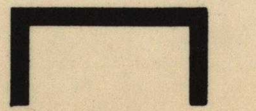
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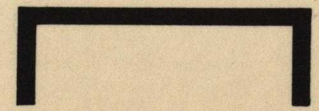
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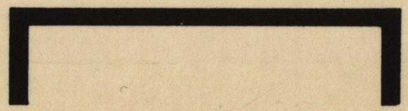
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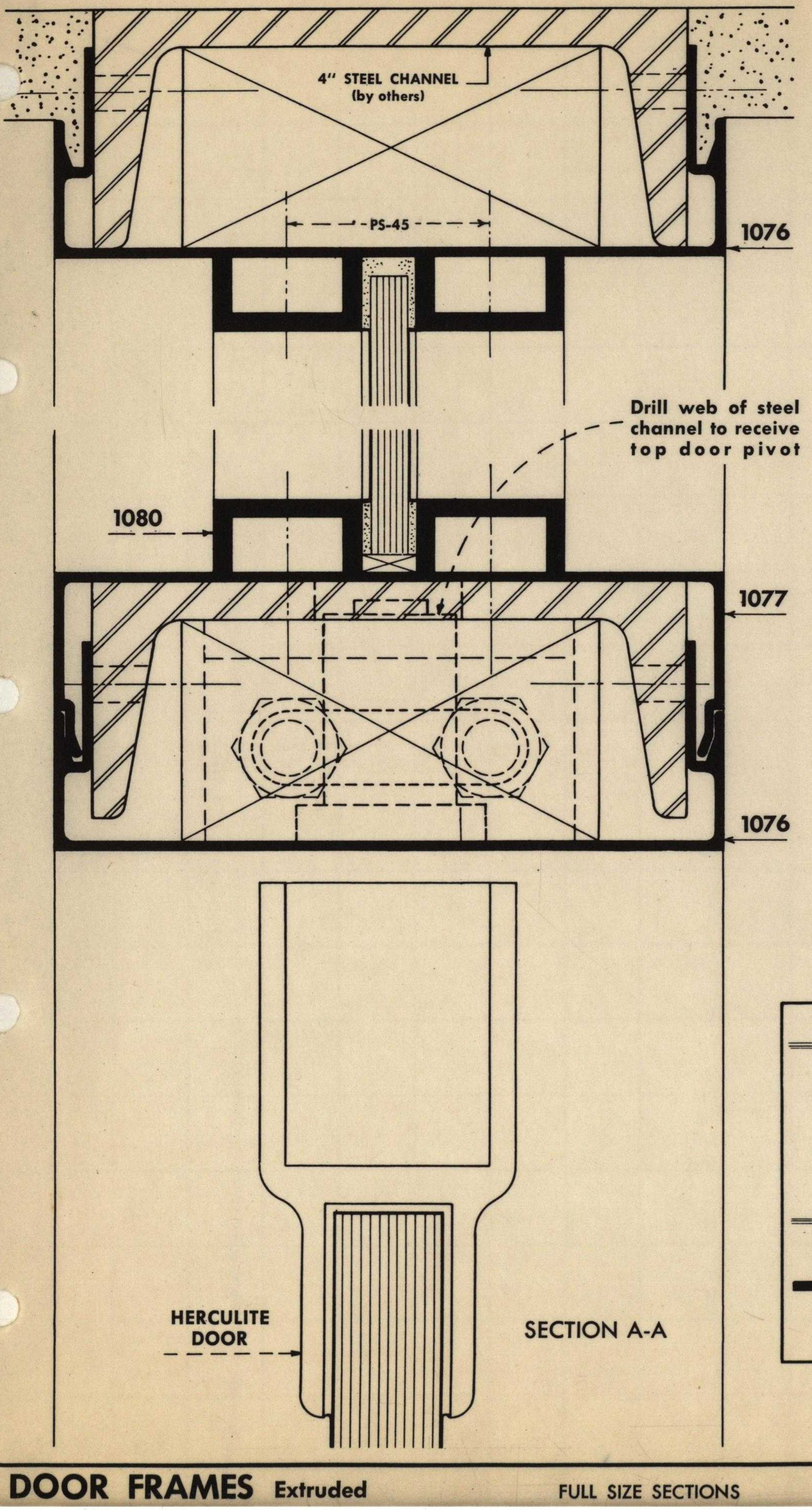
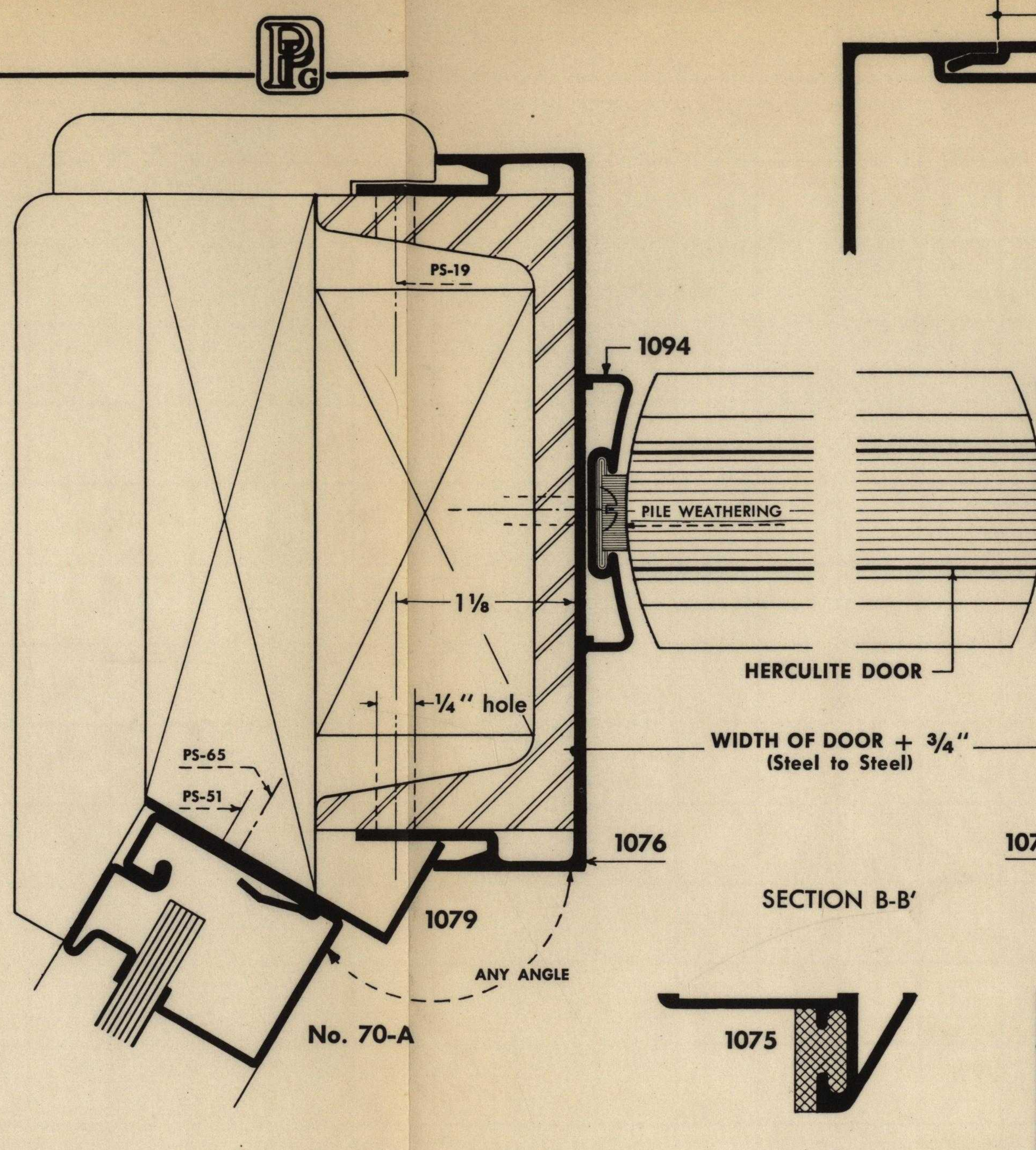
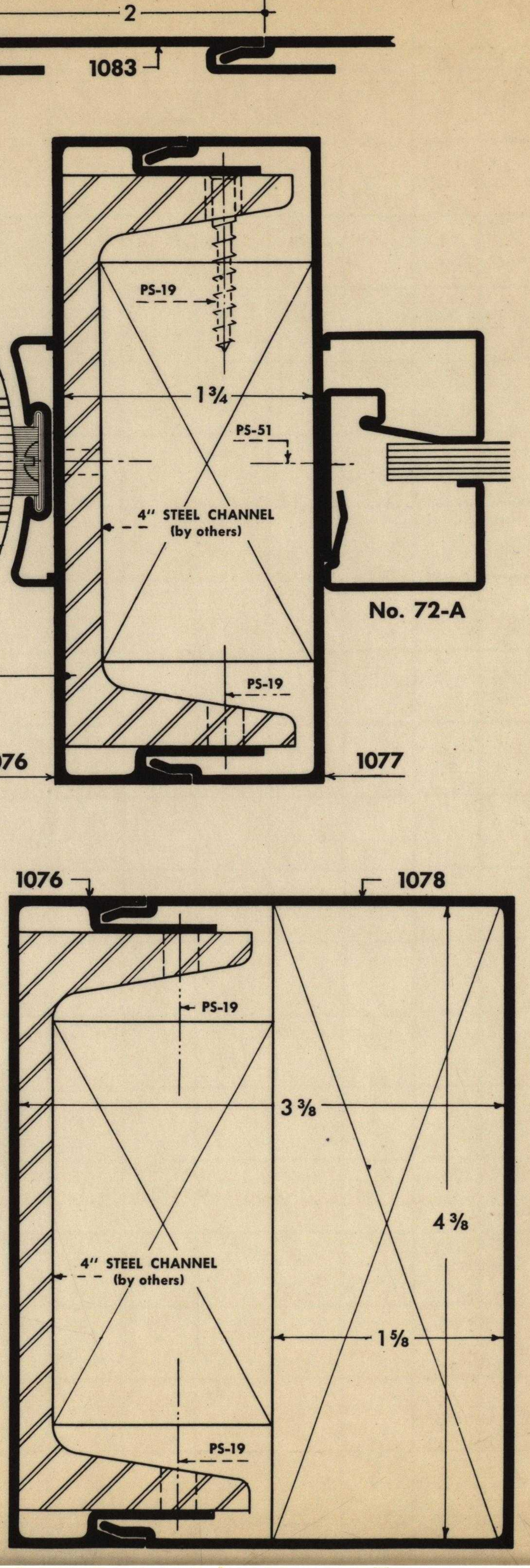
TRIM MOULDINGS Rolled and Extruded

FULL SIZE SECTIONS

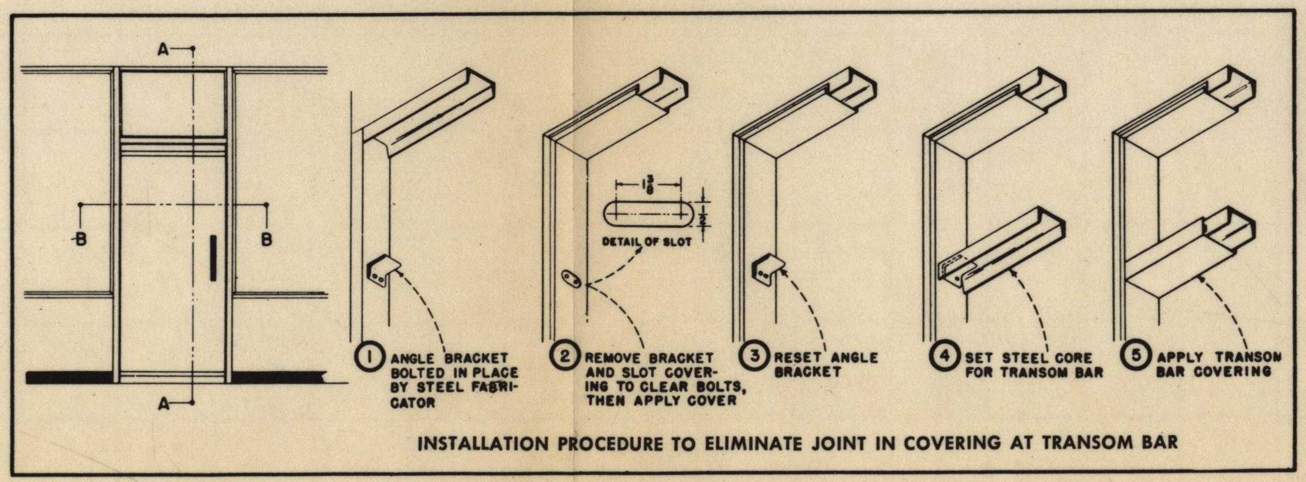

4" STEEL CHANNEL (by others)
PS-45
1076
Drill web of steel channel to receive top door pivot
1080
1077
1076
HERCULITE DOOR

SECTION A-A



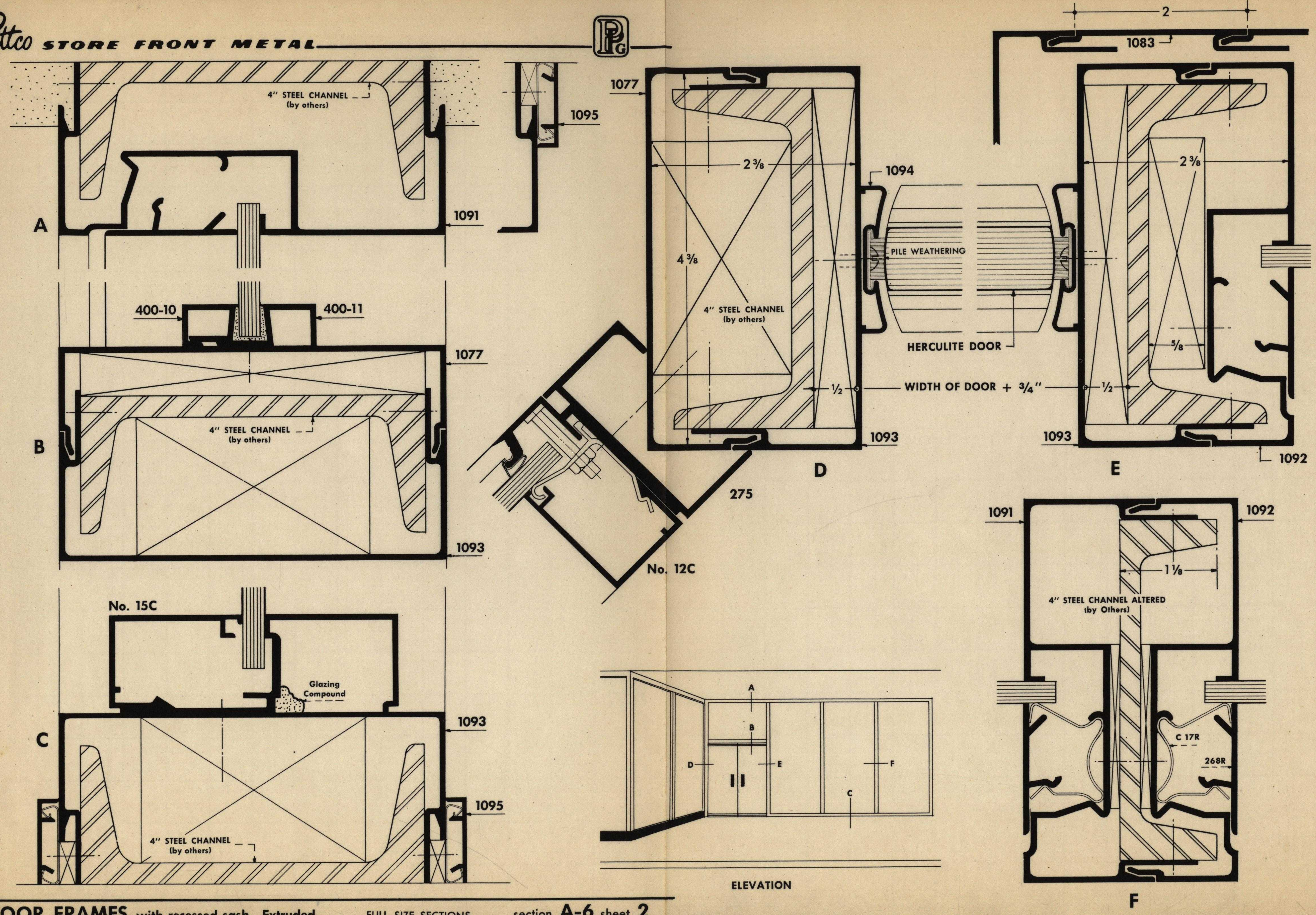


SECTION B-B'



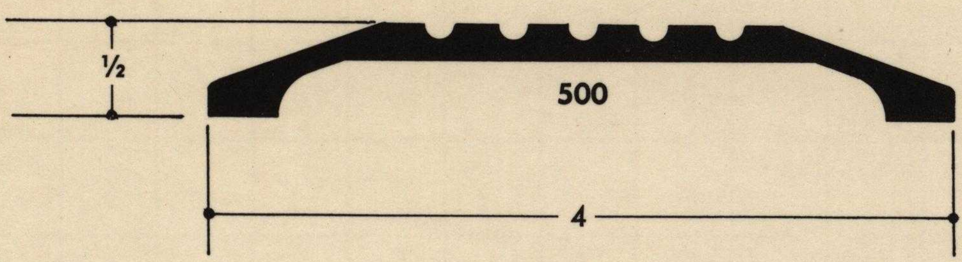
① ANGLE BRACKET BOLTED IN PLACE BY STEEL FABRICATOR
② REMOVE BRACKET AND SLOT COVERING TO CLEAR BOLTS, THEN APPLY COVER
③ RESET ANGLE BRACKET
④ SET STEEL CORE FOR TRANSOM BAR
⑤ APPLY TRANSOM BAR COVERING

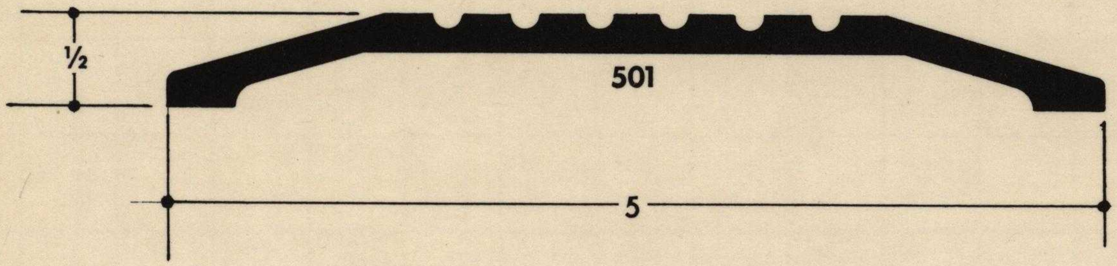
INSTALLATION PROCEDURE TO ELIMINATE JOINT IN COVERING AT TRANSOM BAR



DOOR FRAMES with recessed sash Extruded

FULL SIZE SECTIONS


½
500
4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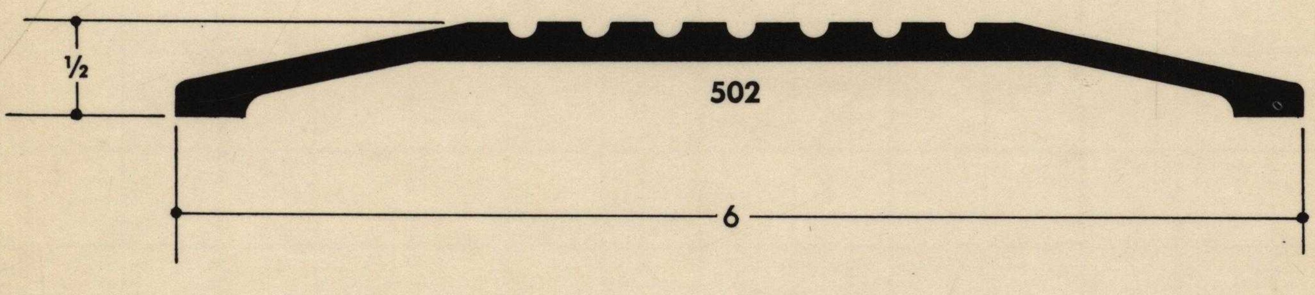
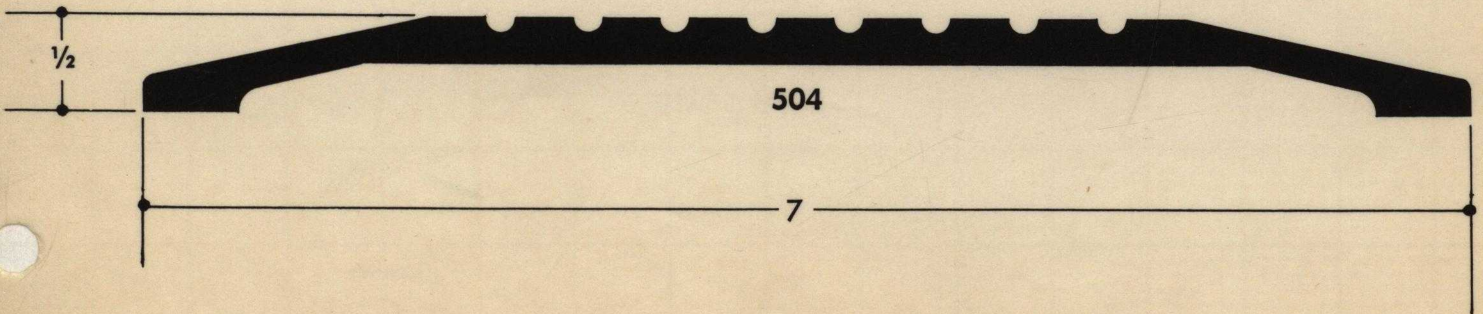
501
5


½
502
6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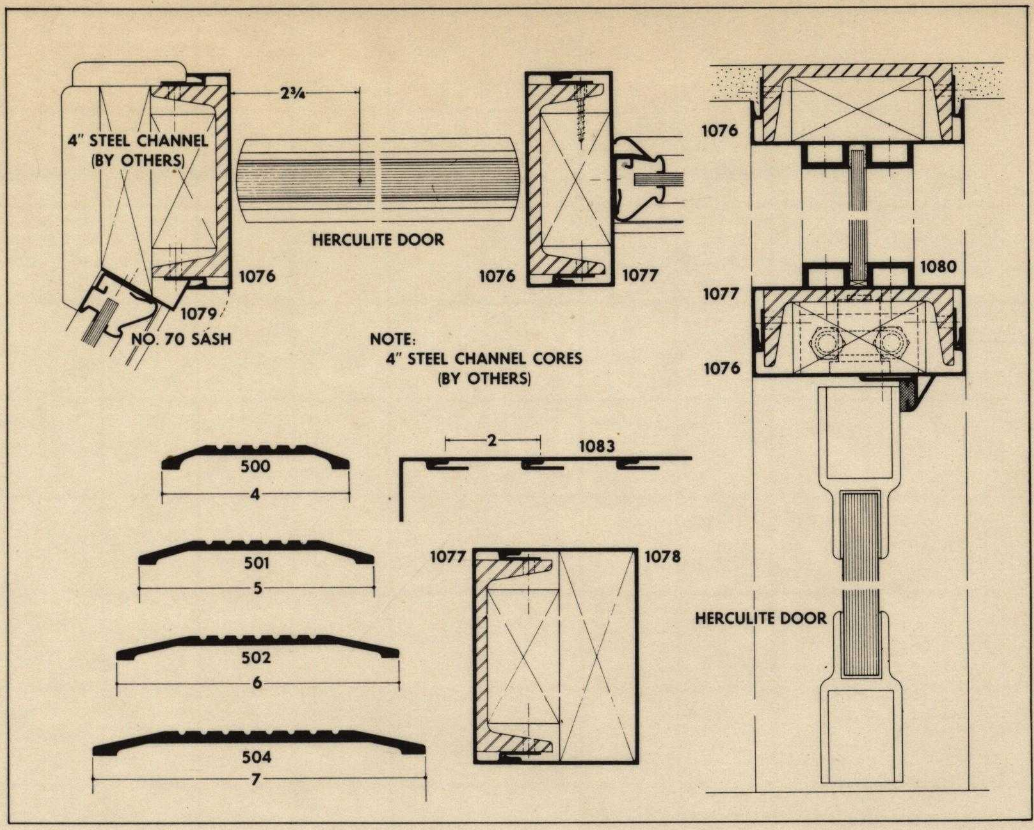
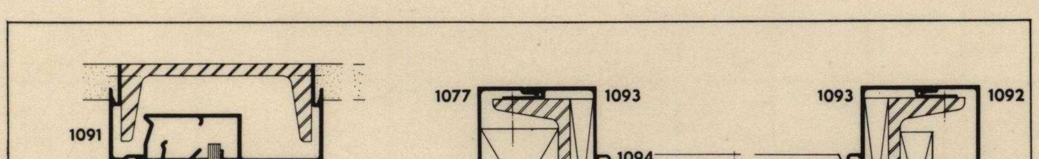
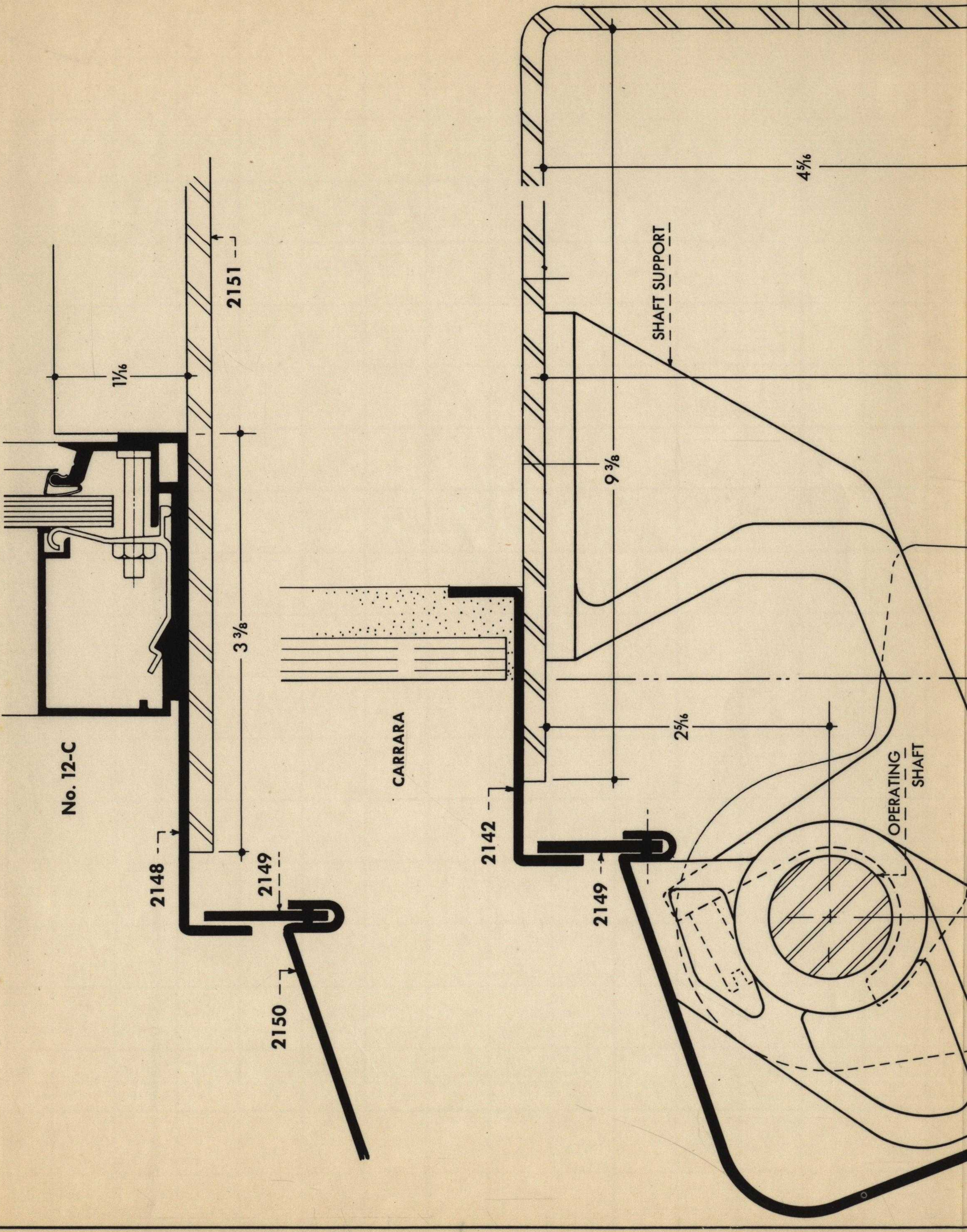




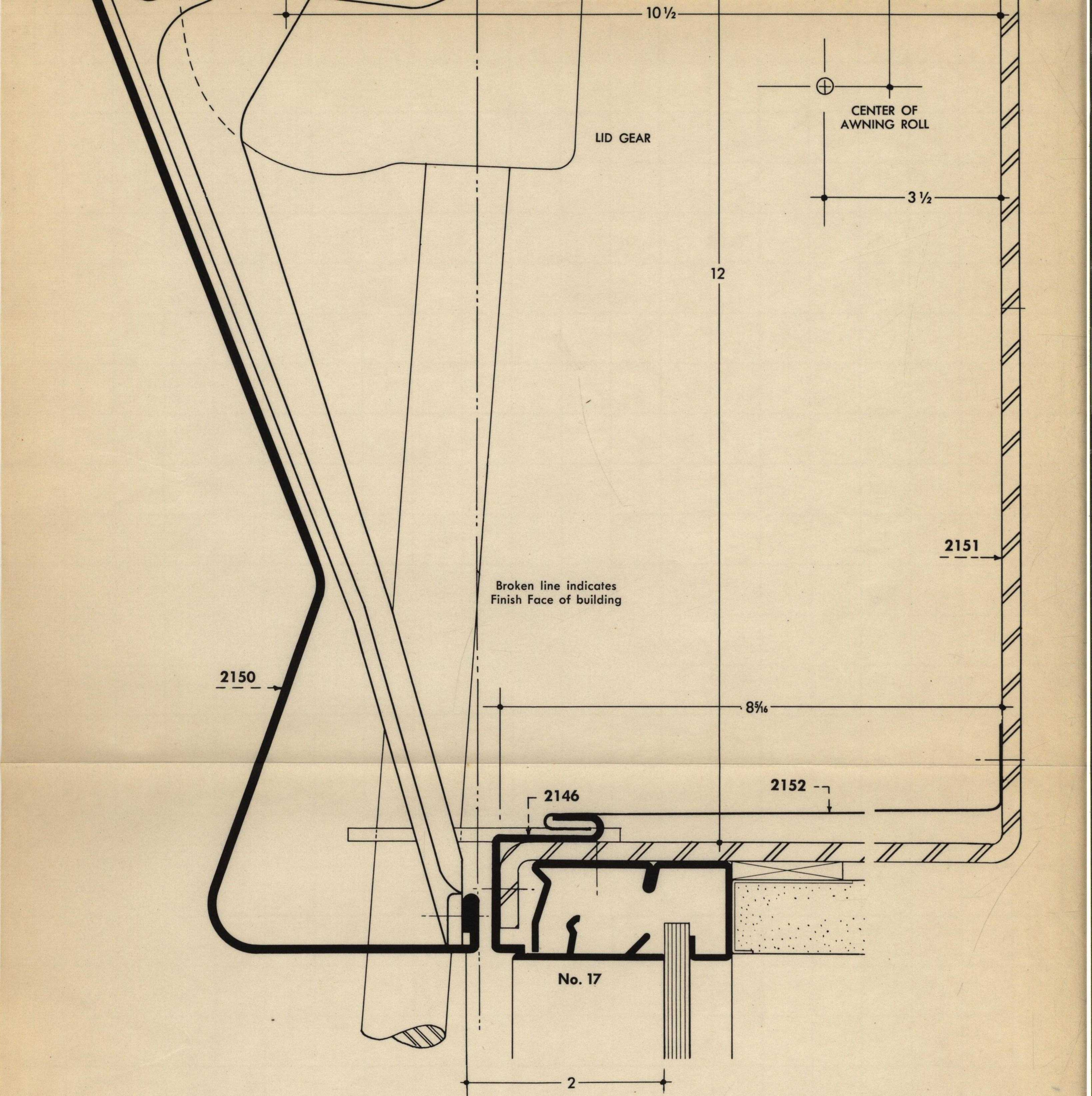
TYPICAL DETAILS

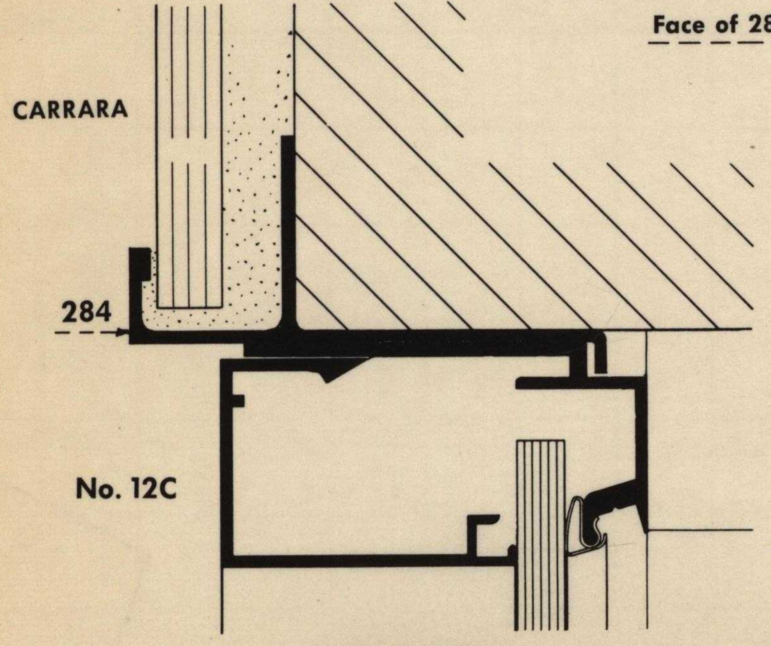
SCALE 3″ = 1′-0″



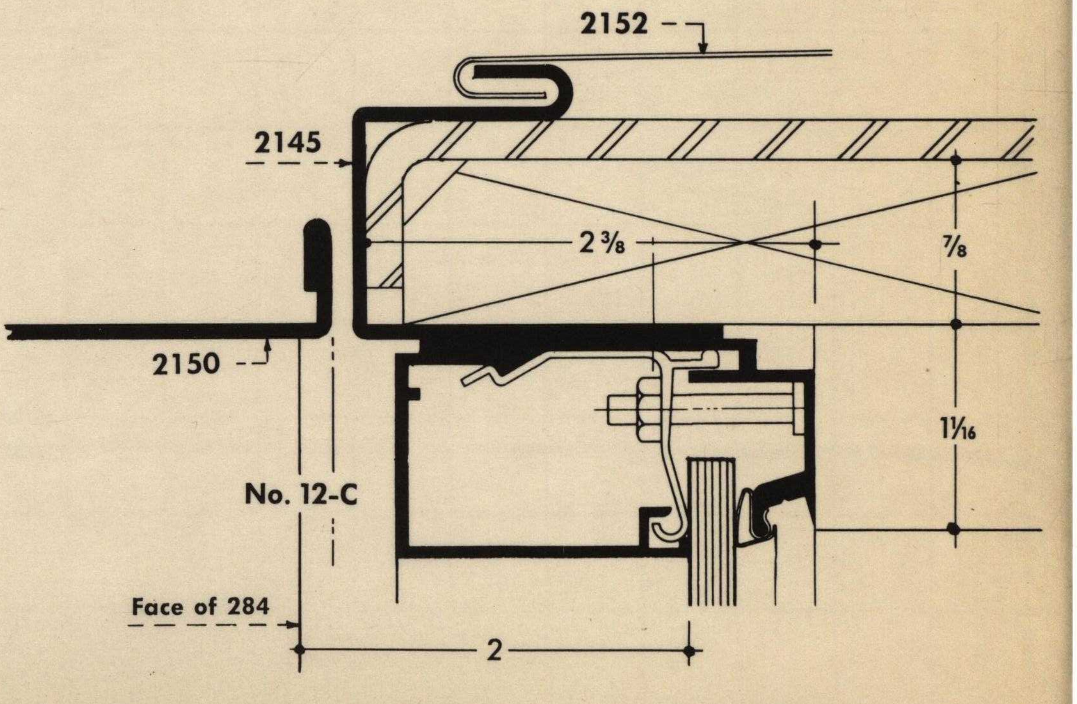
No. 90 AWNING BAR Rolled

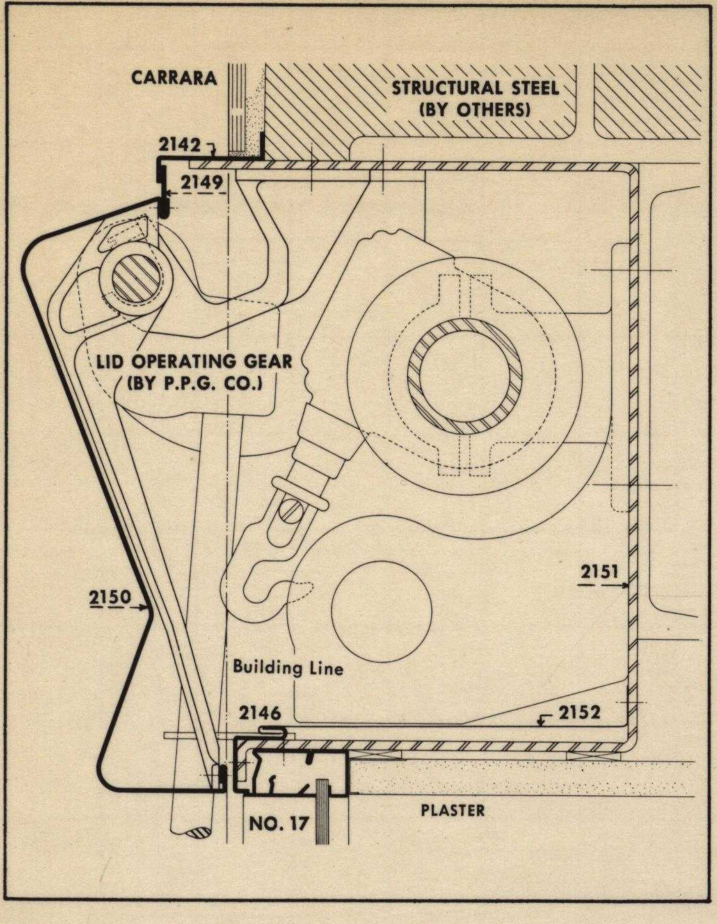
FULL SIZE SECTIONS

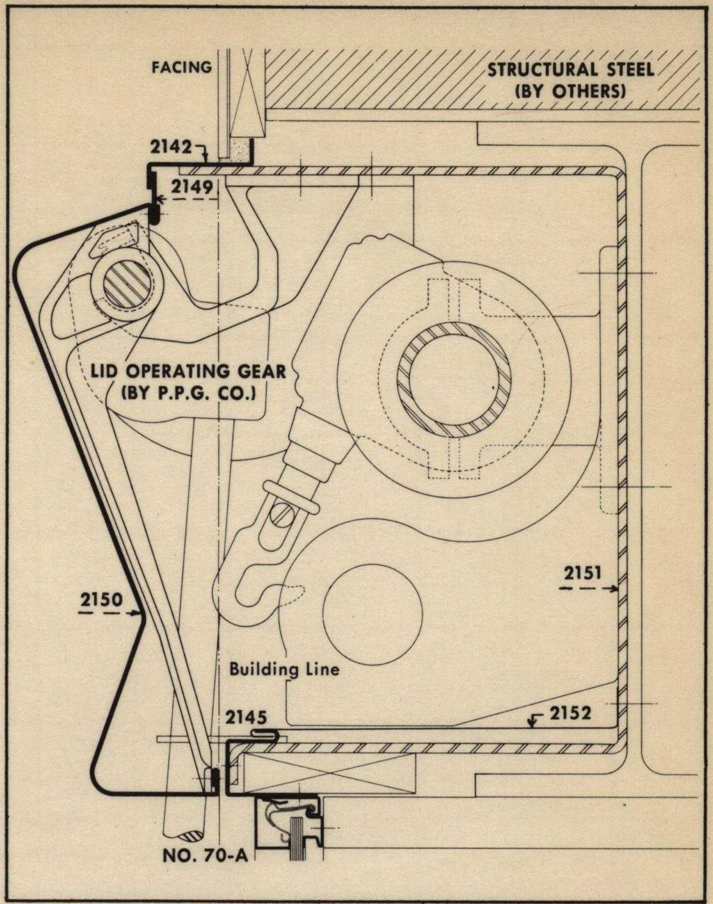


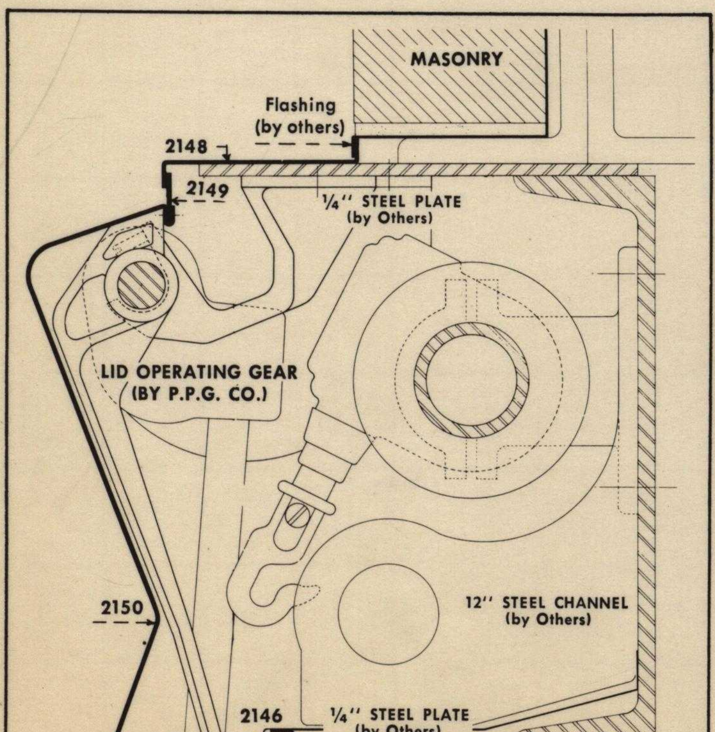


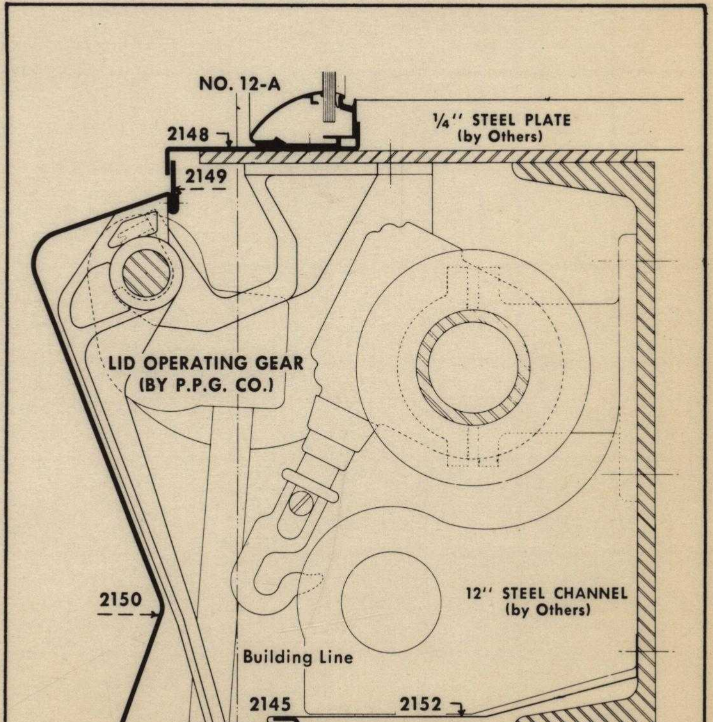
JAMB & SILL
Use 284 at Jamb
and Sill when No. 17
or Regular DeLuxe
is used at Head




CARRARA
STRUCTURAL STEEL (BY OTHERS)
2142
2149
LID OPERATING GEAR (BY P.P.G. CO.)
2150
2151
Building Line
2146
2152
NO. 17
PLASTER

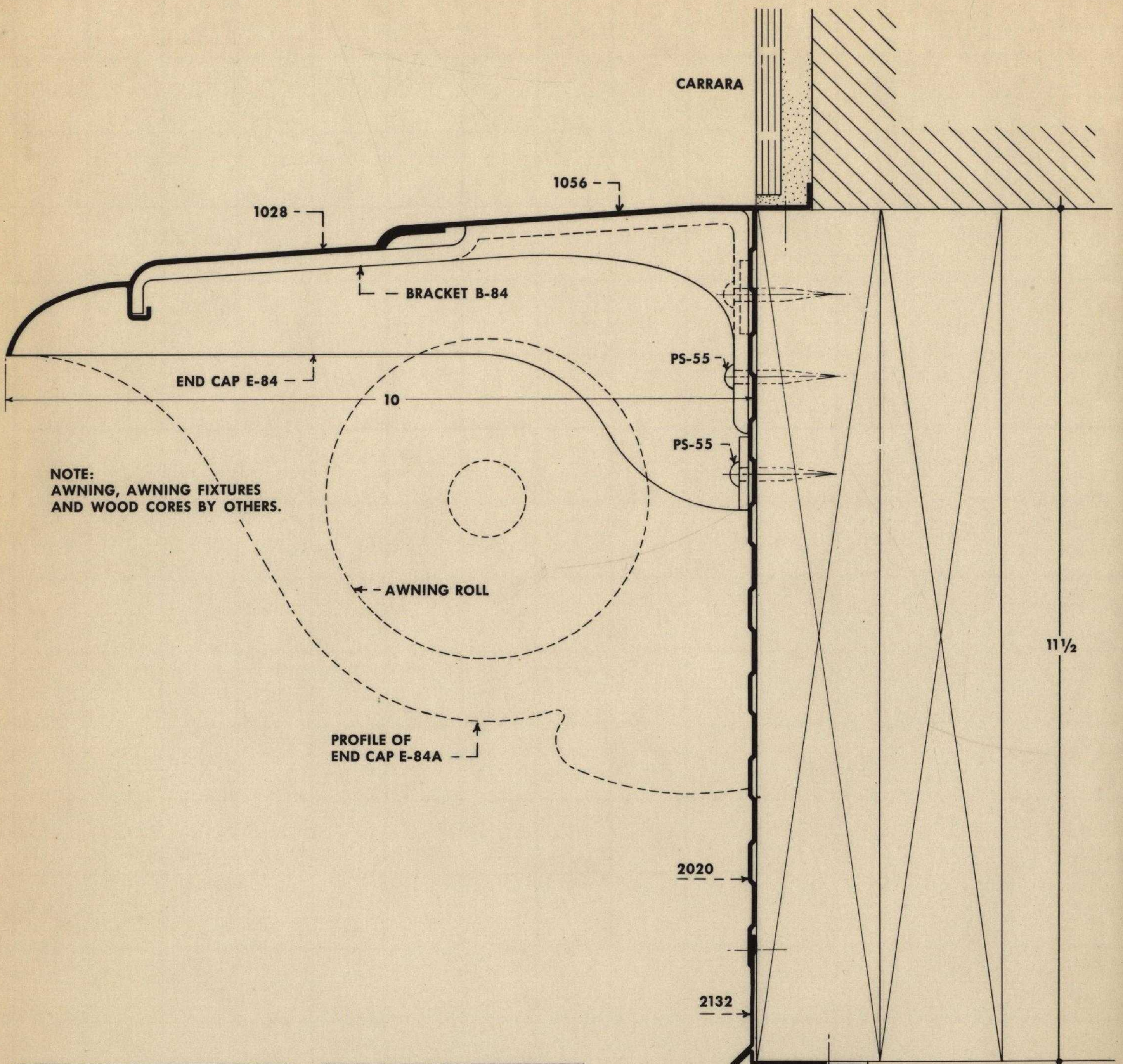

FACING
STRUCTURAL STEEL (BY OTHERS)
2142
2149
LID OPERATING GEAR (BY P.P.G. CO.)
2150
2151
Building Line
2145
2152
NO. 70-A


MASONRY
Flashing (by others)
2148
2149
1/4'' STEEL PLATE (by Others)
LID OPERATING GEAR (BY P.P.G. CO.)
2150
12'' STEEL CHANNEL (by Others)
2146
1/4'' STEEL PLATE (by Others)
Brake
NO. 17


NO. 12-A
1/4'' STEEL PLATE (by Others)
2148
2149
LID OPERATING GEAR (BY P.P.G. CO.)
2150
12'' STEEL CHANNEL (by Others)
Building Line
2145
2152
1/4'' STEEL PLATE (by Others)
NO. 12-A

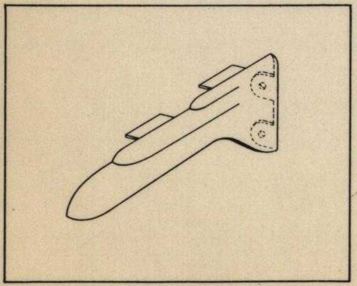
TYPICAL DETAILS

SCALE 3'' = 1'-0''

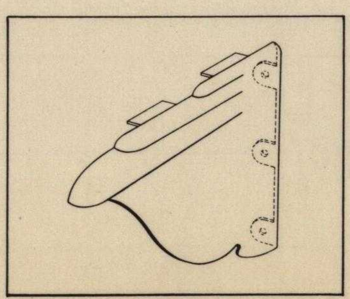


NOTE:
AWNING, AWNING FIXTURES
AND WOOD CORES BY OTHERS.

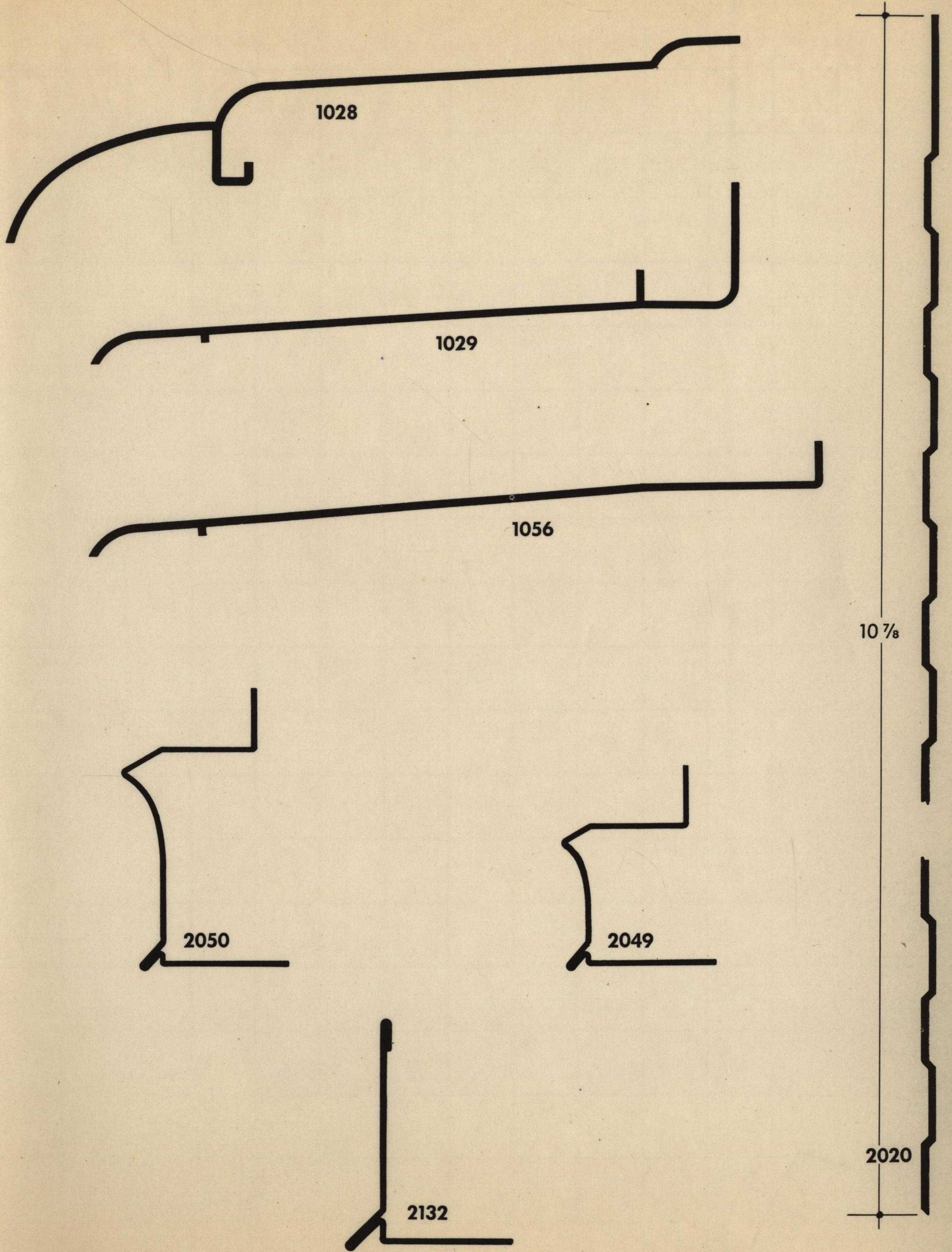
NO. 84 M



NO. E-84
END CAP

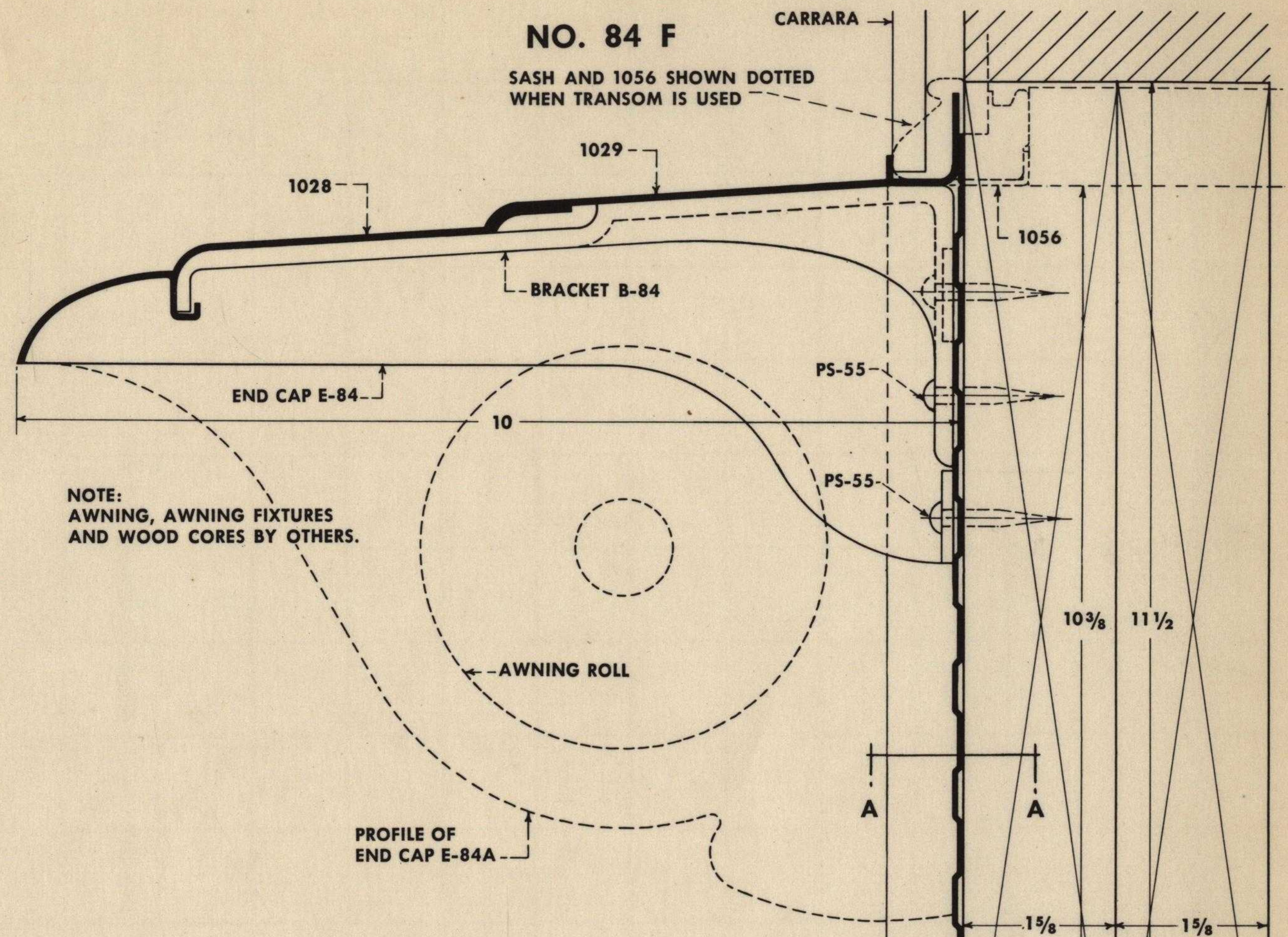


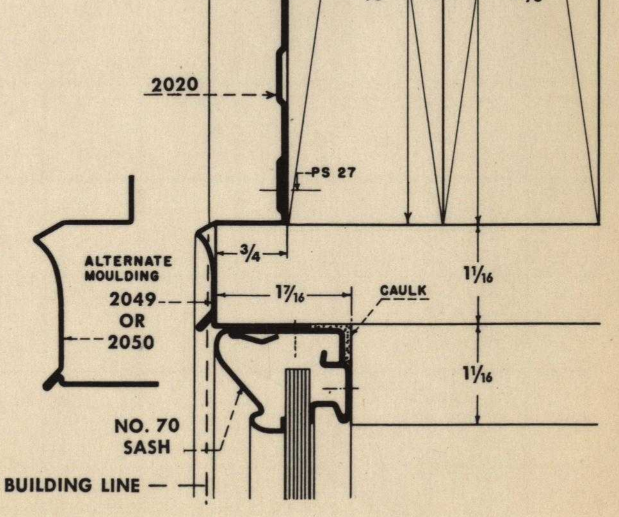
NO. E-84 A
END CAP



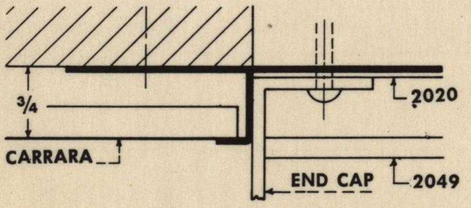
FULL SIZE SECTIONS

NO. 84 F

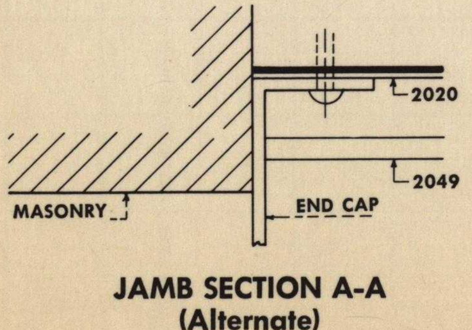




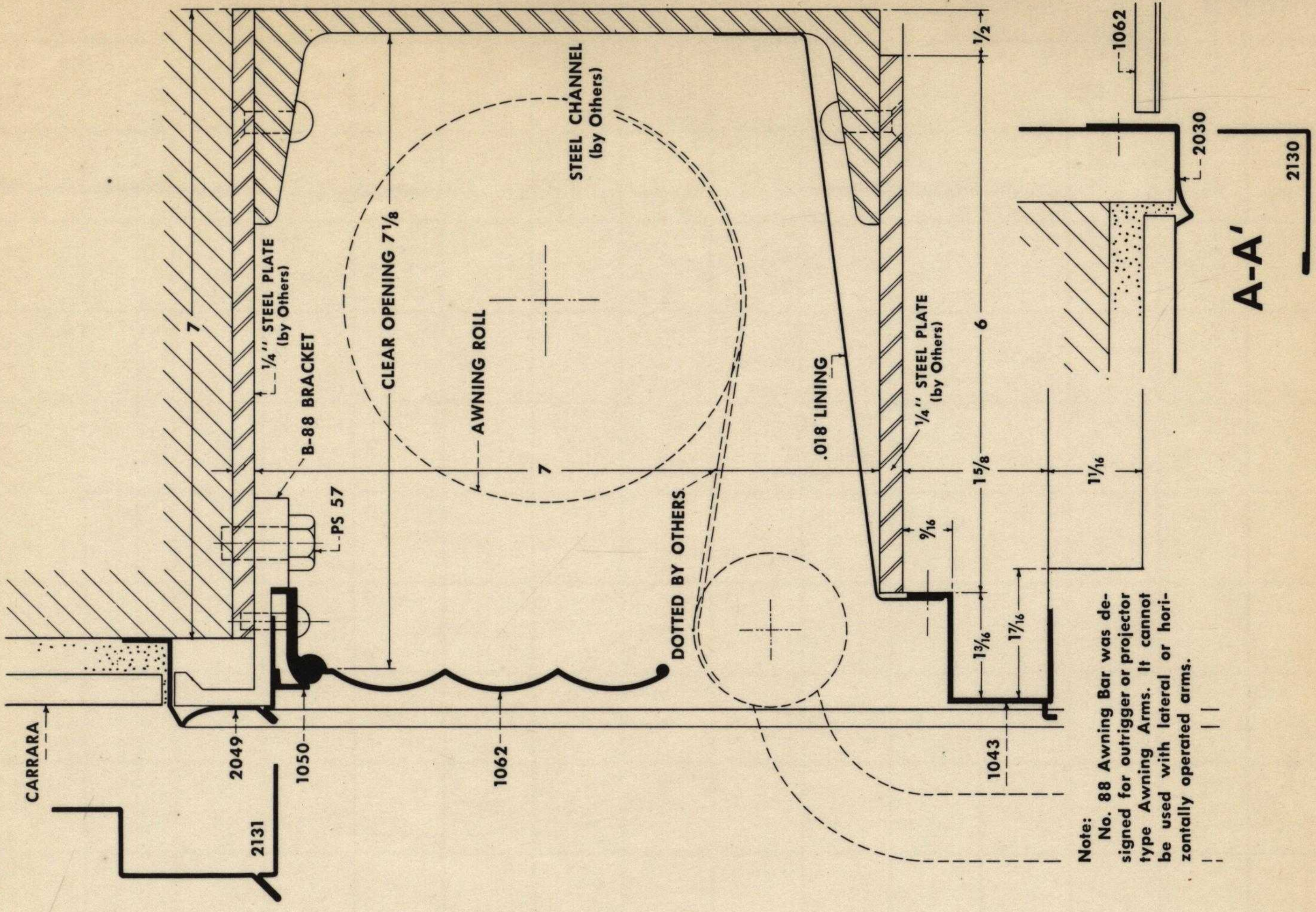
NO. 84



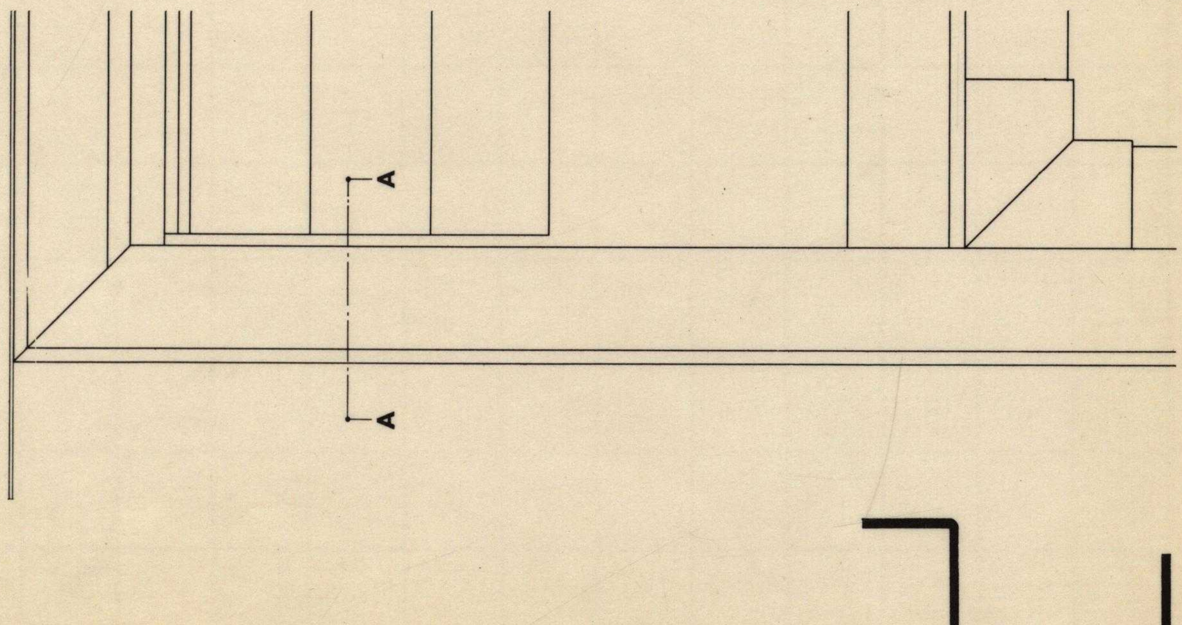
JAMB SECTION A-A

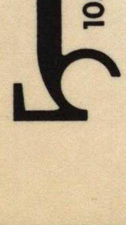


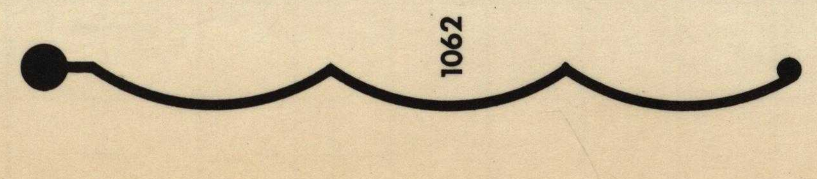
JAMB SECTION A-A (Alternate)

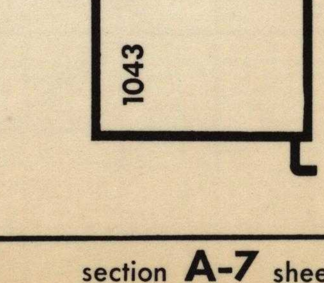


Note: No. 88 Awning Bar was designed for outrigger or projector type Awning Arms. It cannot be used with lateral or horizontally operated arms.



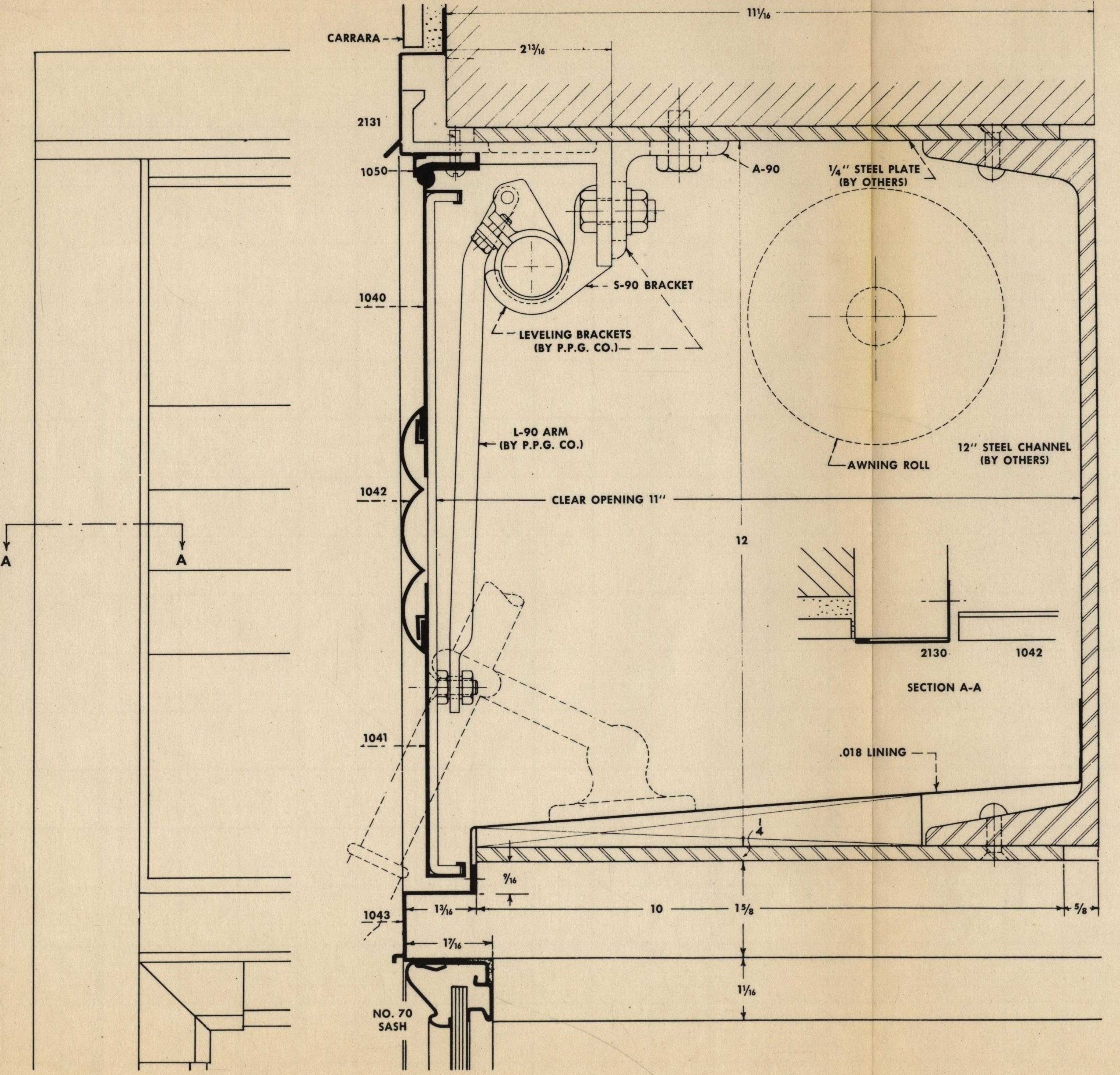


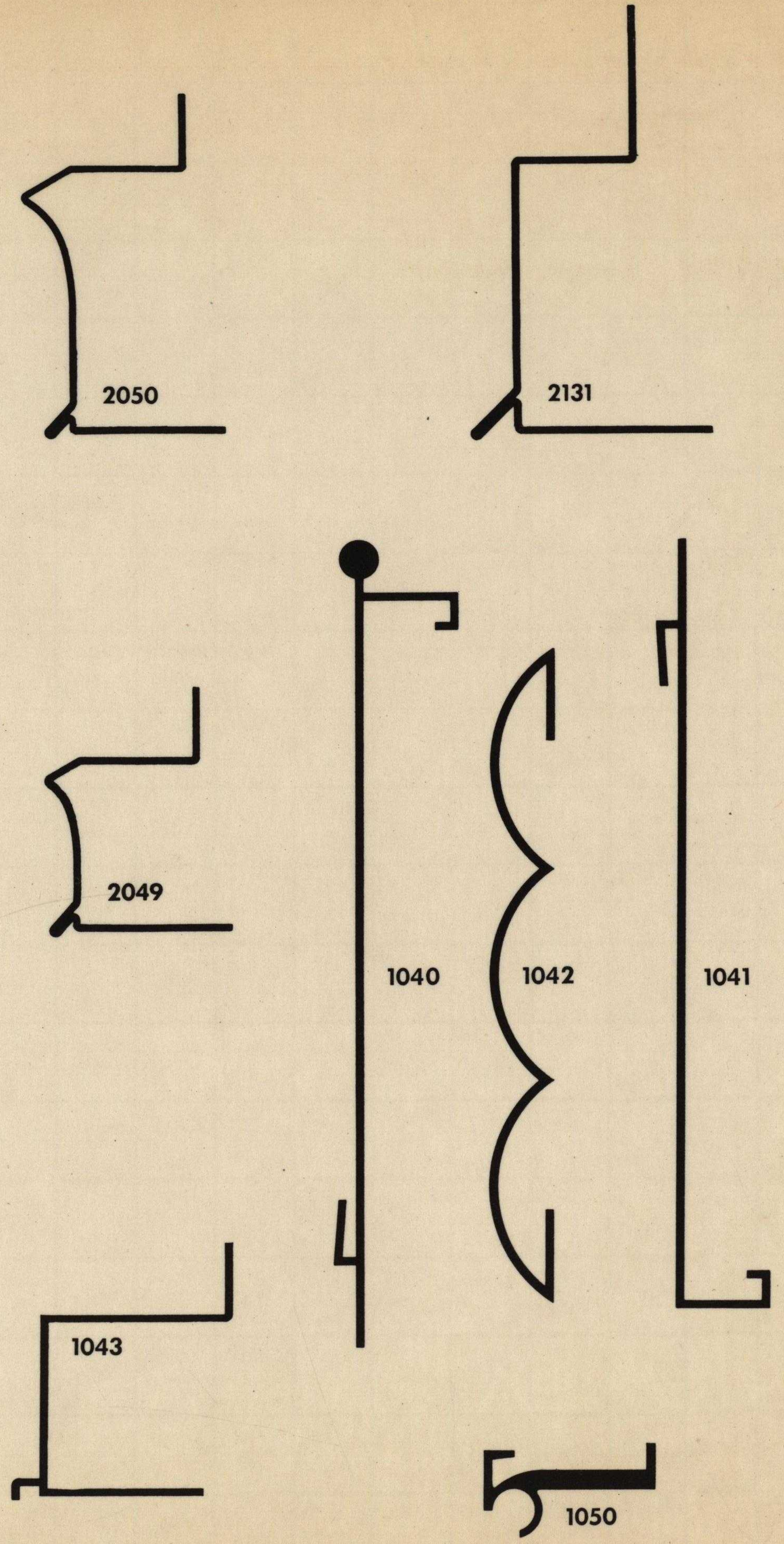




No. 88 Awning Bar

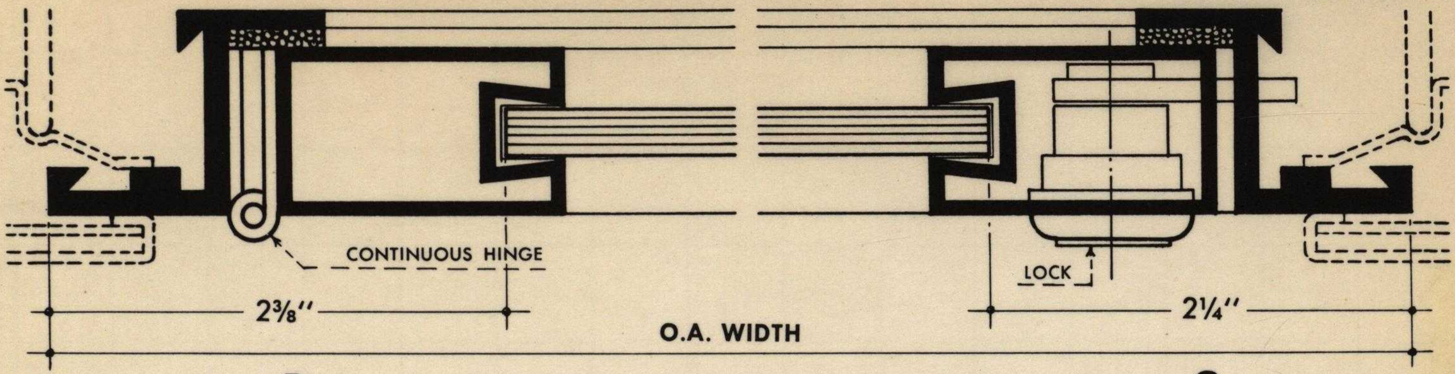
FULL & HALF SIZE SECTIONS



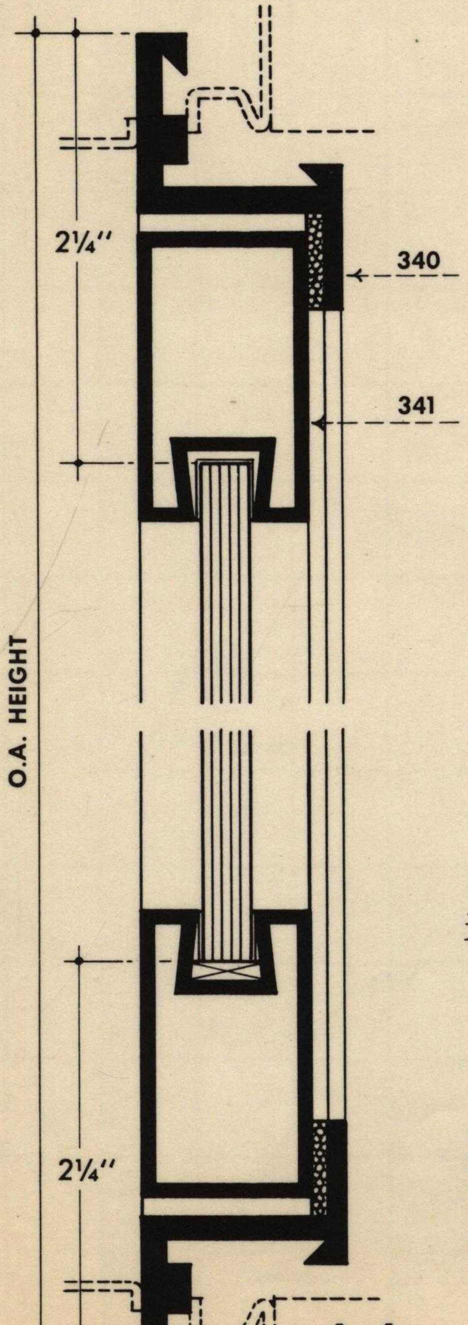


No. 86 Awning Bar

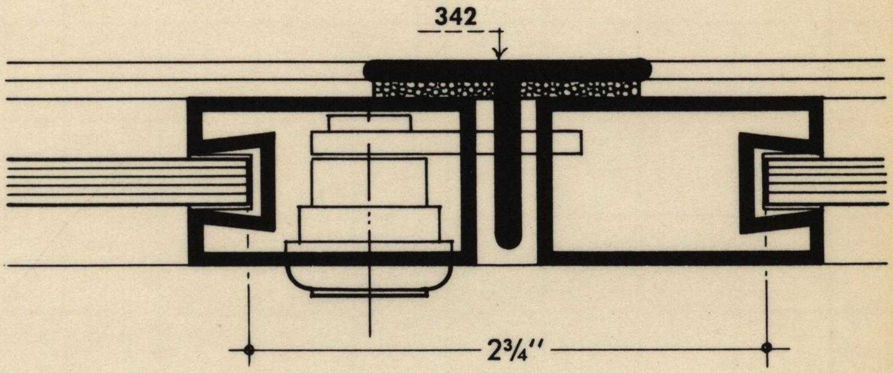
FULL & HALF SIZE SECTIONS



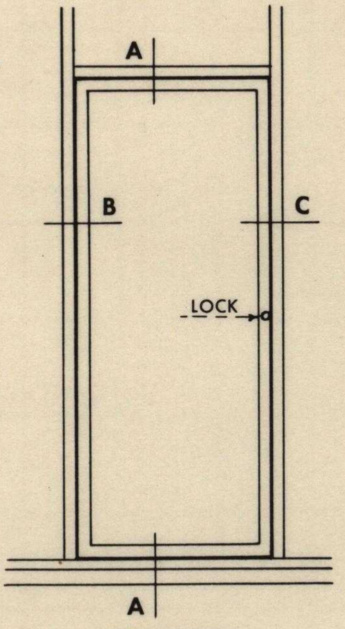
B **C**



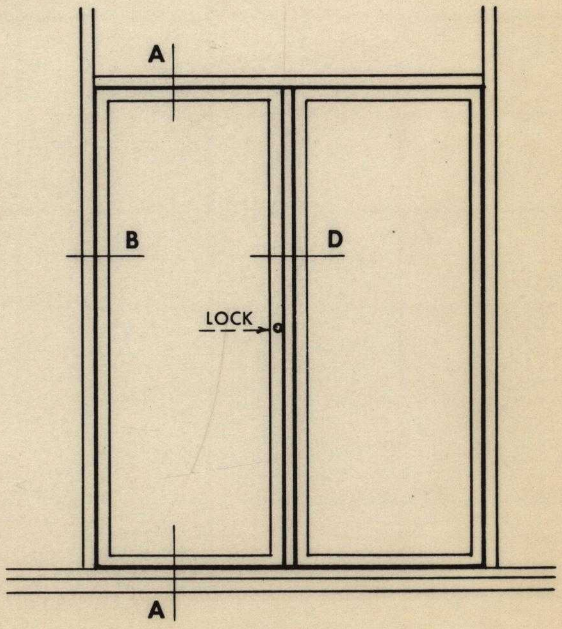
A-A



D



SINGLE DOOR

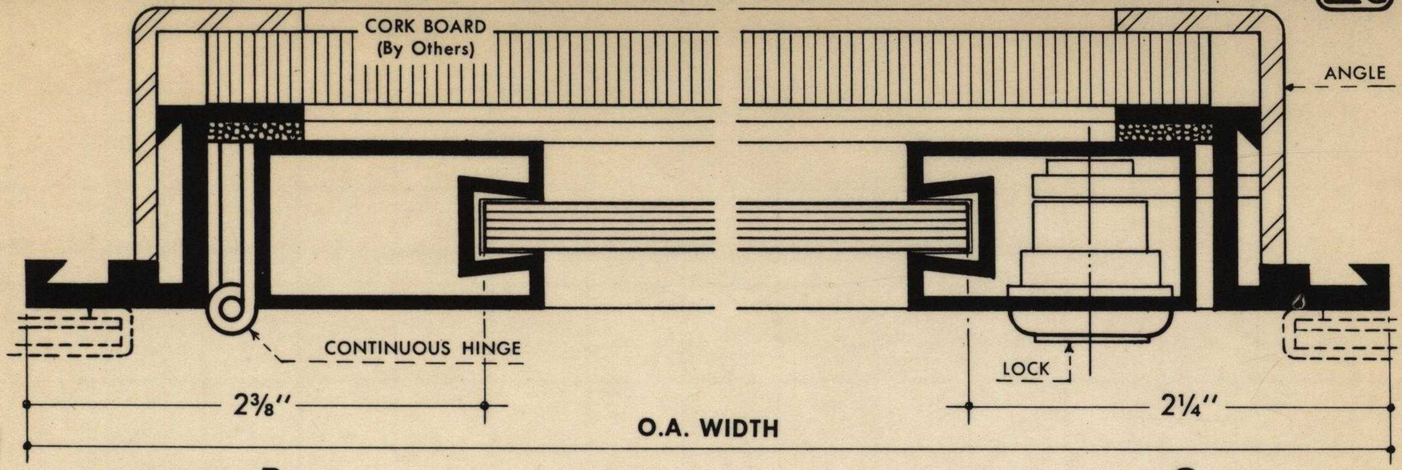


DOUBLE DOORS

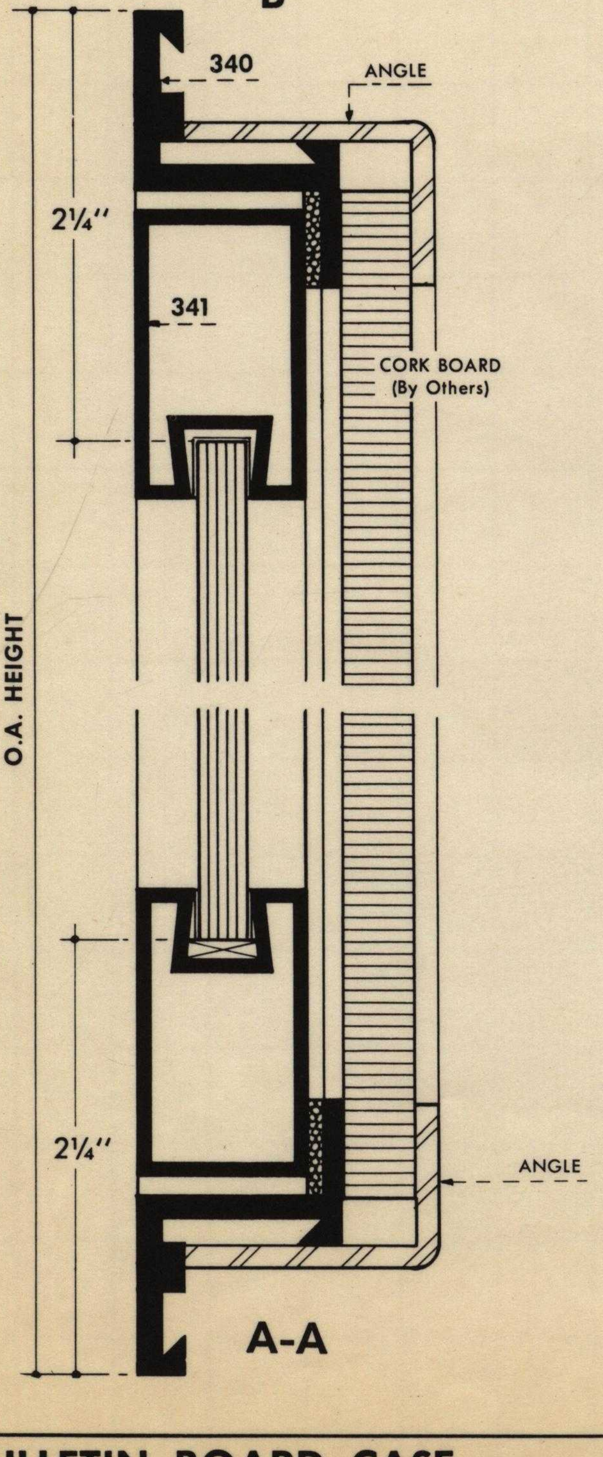
Recommended maximum area for single door not to exceed 15 sq. feet. When width is more than 36″ use double doors.

SHOW CASE DOORS Extruded

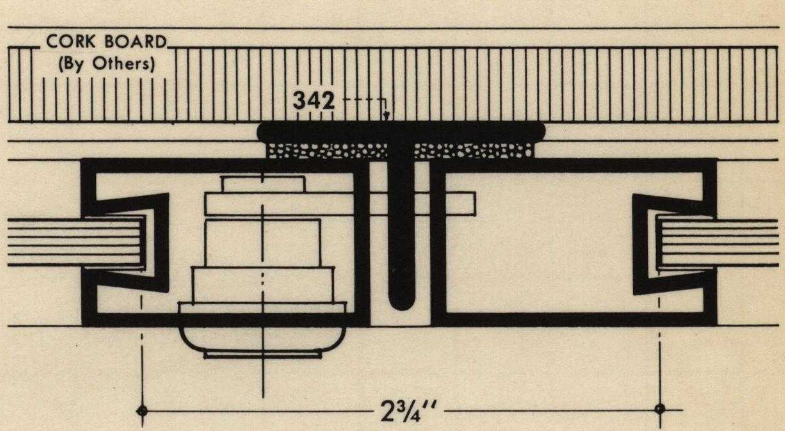
FULL SIZE SECTIONS



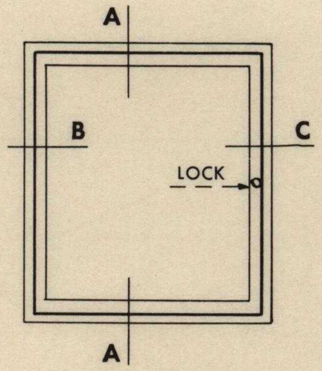
B **C**



A-A

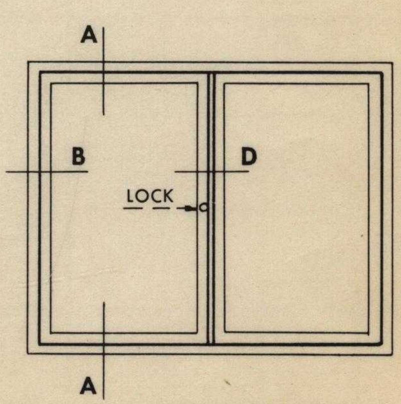


D

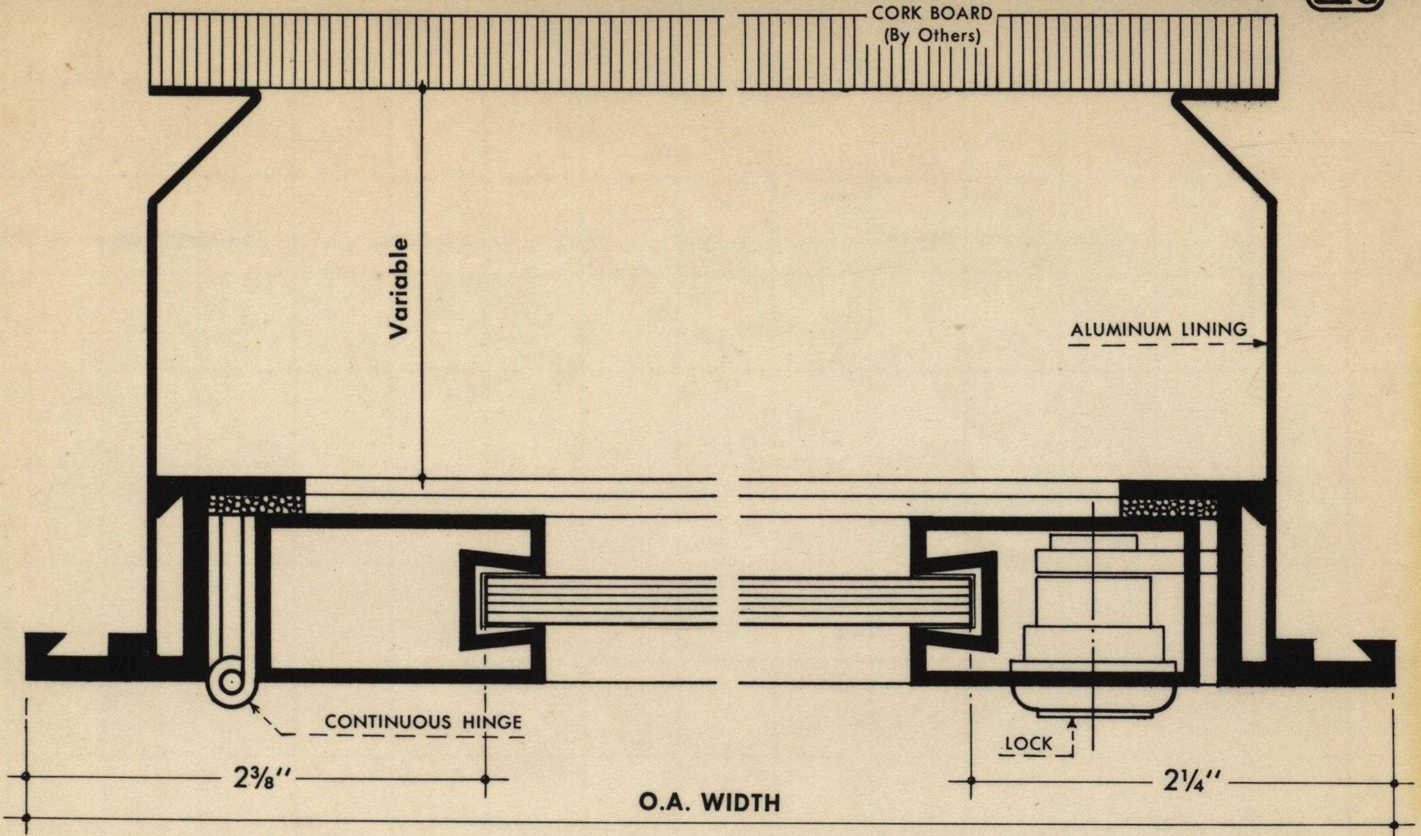


SINGLE DOOR

Recommended maximum area for single door not to exceed 15 sq. feet. When width is more than 36" use double doors.

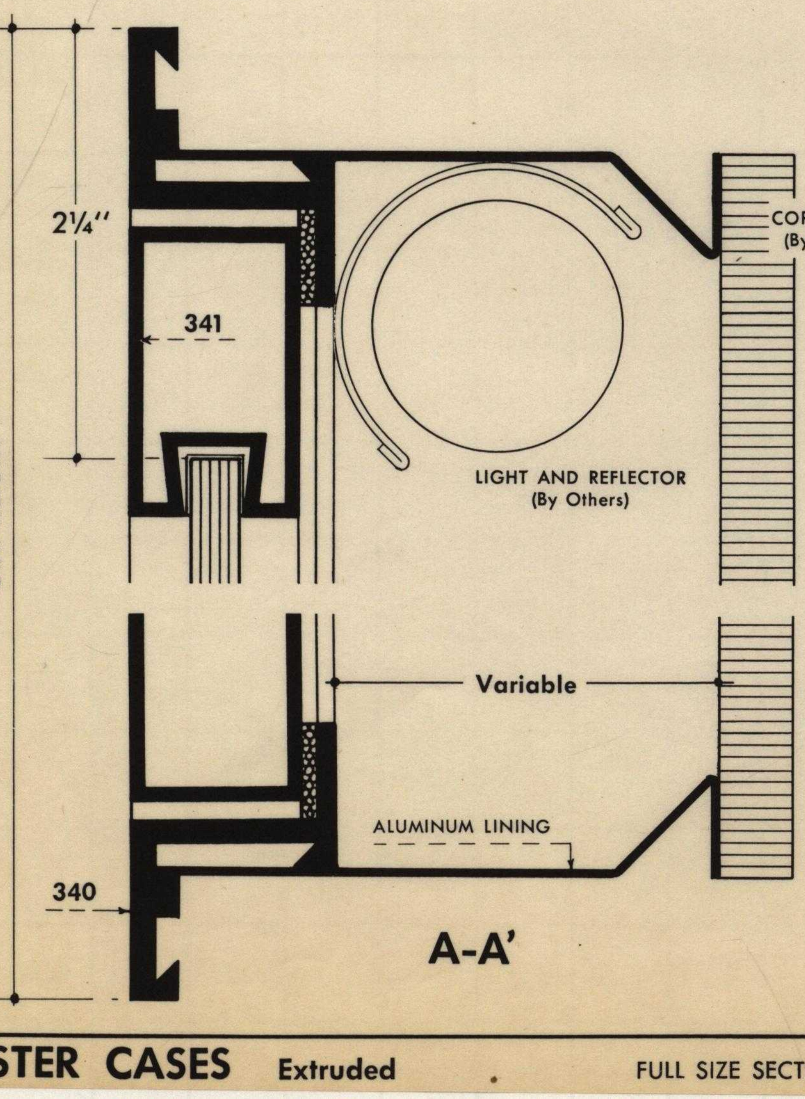


DOUBLE DOORS

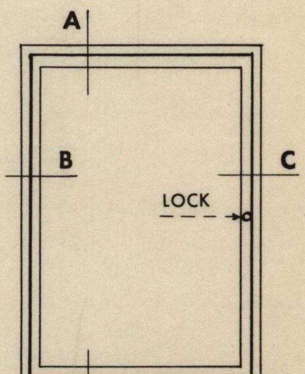


B

C

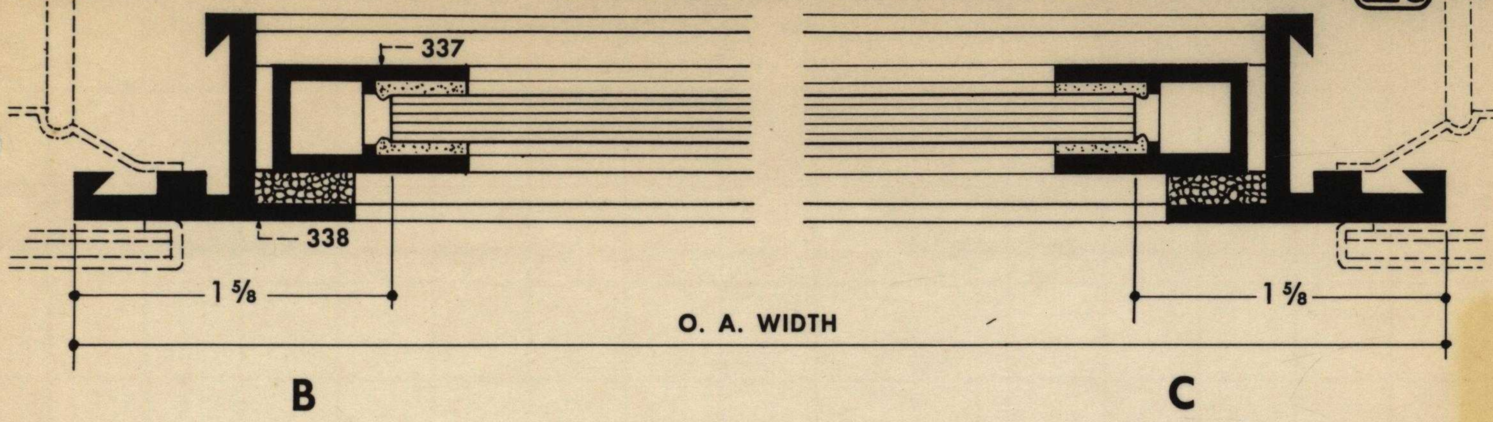


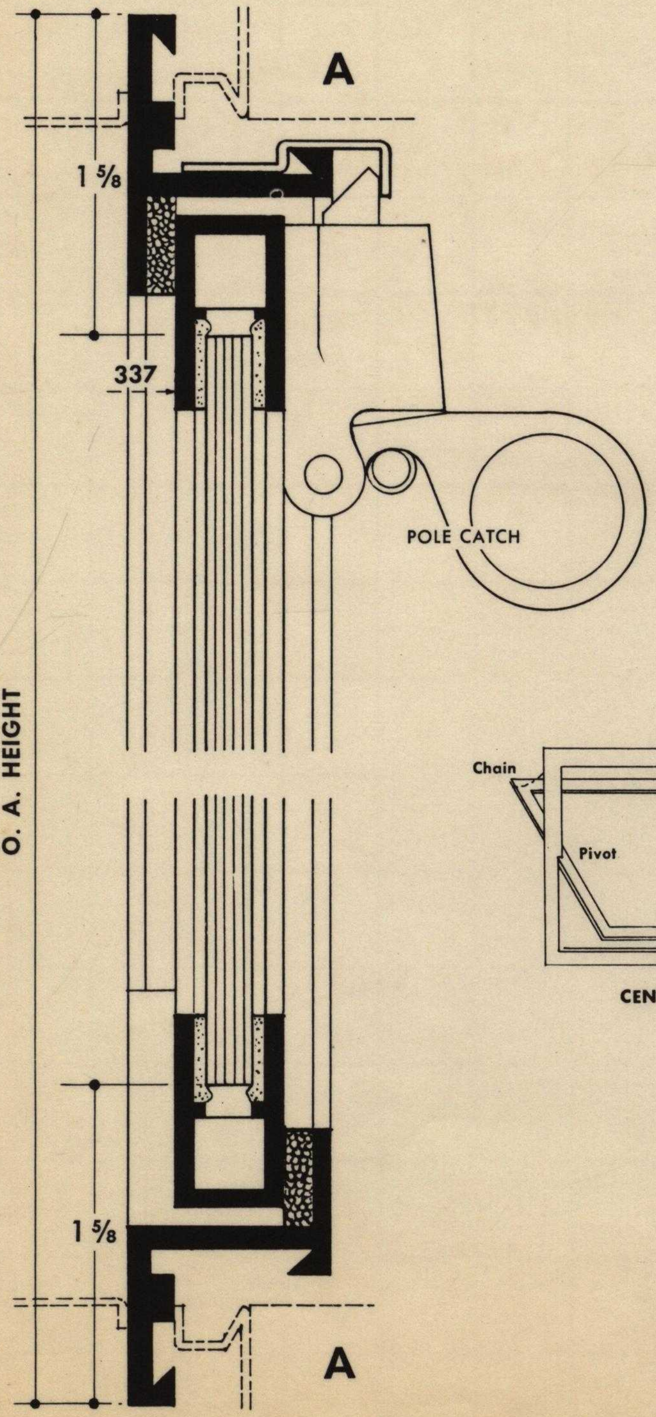
A-A'

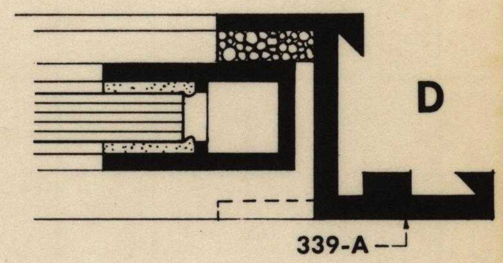


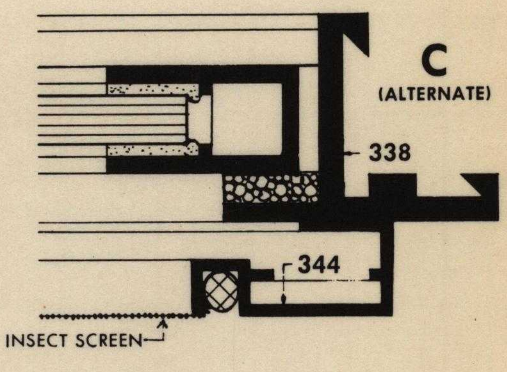
SINGLE DOOR

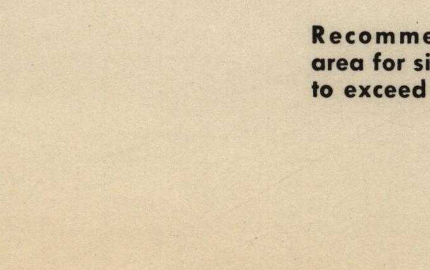
Recommended maximum area for single door not to exceed 15 sq. feet. When width is more than 36″ use double doors.





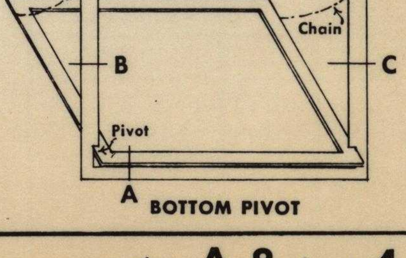






CENTER PIVOT

Recommended maximum area for single ventilator not to exceed 12 sq. feet.



BOTTOM PIVOT

TUBELITE

Tubelite DOORS AND FRAMES

SECTION B-1 STANDARD ENTRANCES

SECTION B-2 SPECIAL DOORS AND ENTRANCES

SECTION B-3 SPECIAL MULLIONS AND SCREEN DOOR

SECTION B-4 FULL SIZE DETAILS

SECTION B-5 HARDWARE AND MOULDINGS

GENERAL:

Aluminum entrances shall be Pittsburgh Plate Glass "Tubelite" tubular aluminum doors, frames, trim, anchors and hardware as shown on details.

MATERIAL:

All sections of doors and frames shall be extruded members of Architectural Alloy No. 63S-T. Screws shall be of 24S-T4 aluminum alloy and cadmium plate brass or bronze.

FABRICATION:

Doors shall be fabricated of extruded hollow aluminum tubes with no exposed seams. Frames may be either extruded tube or open channel, depending upon the strength of construction required. Wall thickness shall not be less than ⅛″. Trim mouldings shall not be less than 1/16″ in thickness. Anchor brackets at joints and reinforcement for hardware shall be completely concealed and fastened in place without fastening method being detectable on visible surfaces. Mechanical joints of doors and frames shall be accurately milled to a hairline watertight joint. Glazing member is of such design that it is snapped in, eliminating use of exposed screws.

FINISH:

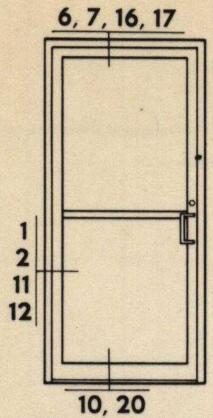
All parts shall be finished in standard 204 A2. Sample of the finish will be submitted to architect (upon request) for approval.

ERECTION:

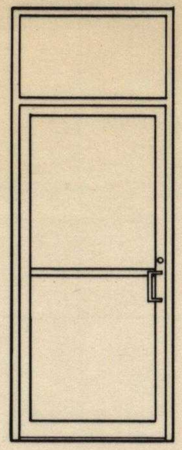
All openings shall be prepared plumb and square by others. Doors and frames shall be installed in the opening plumb and in true alignment, in accordance with instructions attached to all doors. Tubular frames shall be secured to the floor by means of anchors. Anchor screws shall be used at the side and head jambs. Channel frame shall be anchored to the jambs by means of steel cores securely fastened to the jambs, and the aluminum frame attached to the anchors in accordance with drawings prepared by the fabricator.

FINISH HARDWARE:

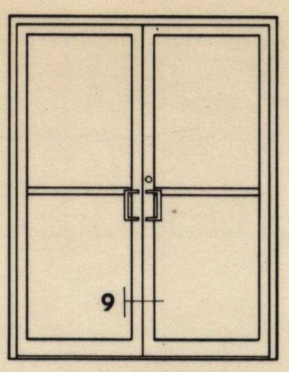
All stock doors shall have standard hardware furnished by the door manufacturer. Hardware for custom-built doors and special entrances shall be specified by the architect. Hardware furnished by others shall be sent to the door manufacturer for application to the door.



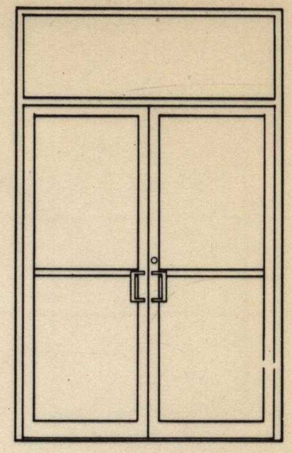
TYPE S-1, SINGLE DOOR WITH OR WITHOUT FRAME



TYPE S-2, SINGLE DOOR WITH TRANSOM FIXED OR OPERATING



TYPE D-1, DOUBLE DOOR WITH OR WITHOUT FRAME

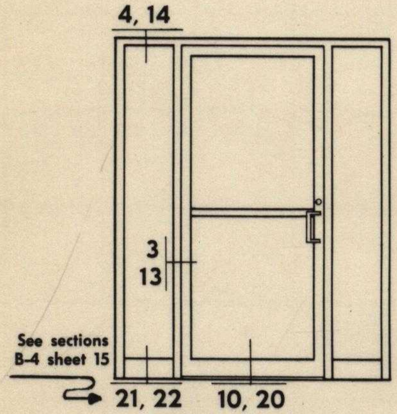


TYPE D-2, DOUBLE DOOR WITH TRANSOM FIXED OR OPERATING

STOCK DOORS & FRAMES

SINGLE DOORS	DOUBLE DOORS
3'-0"x7'-0"	2'-6"x7'-0"
3'-6"x7'-0"	3'-0"x7'-0"

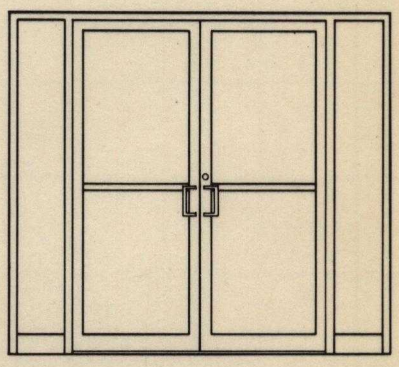
STANDARD SIZES



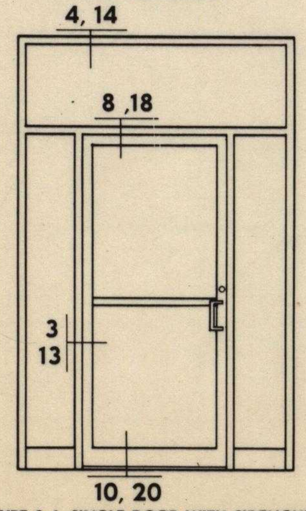
TYPE S-3, SINGLE DOOR WITH SIDELIGHTS

STANDARD HARDWARE — 1 pair of Butt Hinges per door, Push Bar, Pull Handle, Dead Bolt Lock, Overhead Door Closer, Top and Bottom Flush Bolts and 4" Threshold. Stock doors can also be furnished on single or double-acting floor checks, with or without 7½" threshold.

NOTE—Unless otherwise specified, door or doors will be furnished with Frame, Fixed Transom, (when Transom is required), and 4" Bottom Rail.

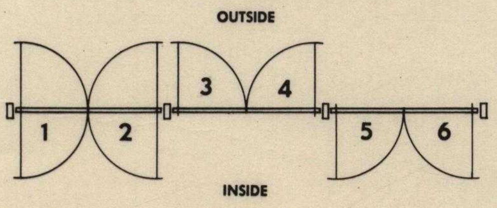


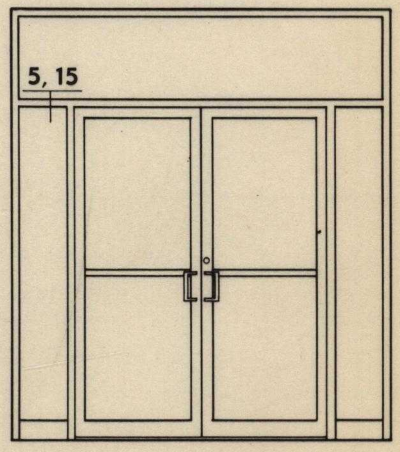
TYPE D-3, DOUBLE DOOR WITH SIDELIGHTS



TYPE S-4, SINGLE DOOR WITH SIDELIGHTS AND WITH TRANSOM FIXED OR OPERATING

SPECIFY SWING OF DOOR BY NUMBER

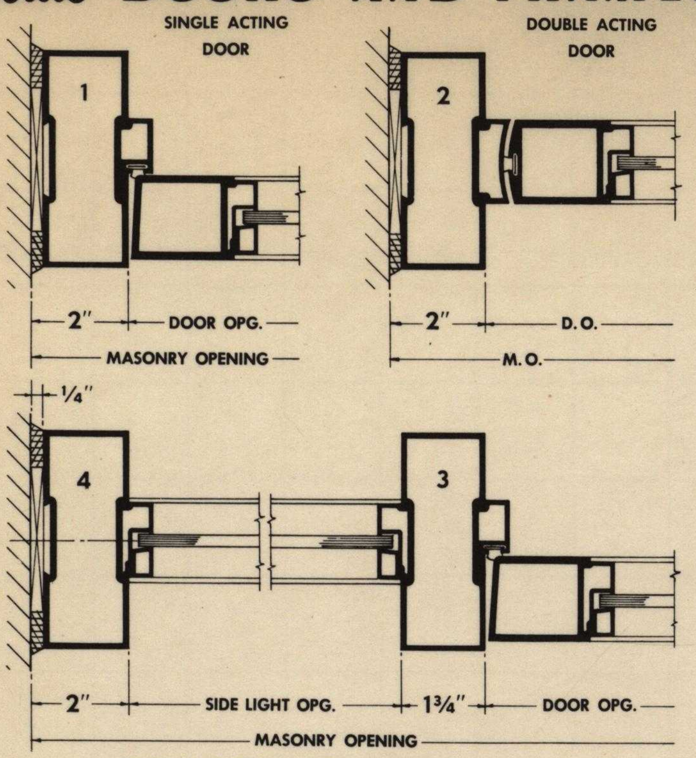




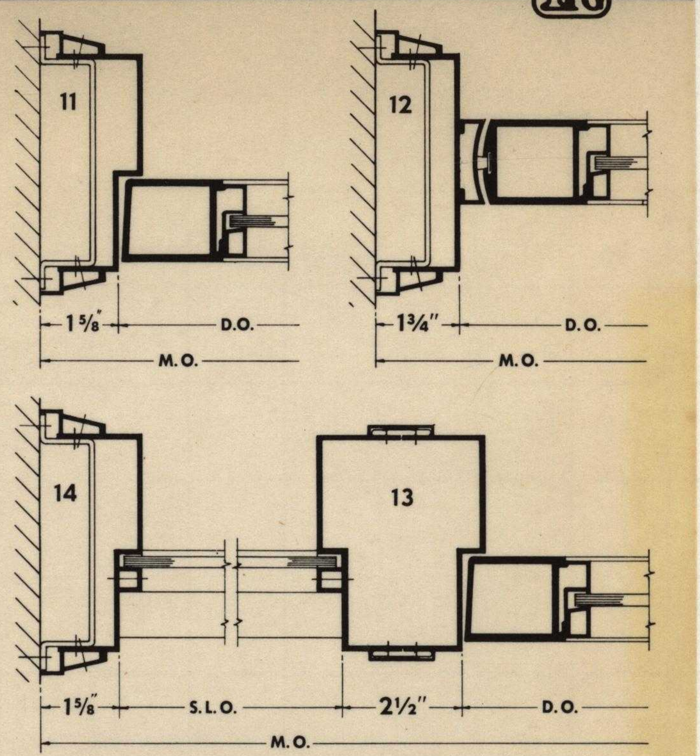
TYPE D-4, DOUBLE DOOR WITH SIDELIGHTS WITH TRANSOM FIXED OR OPERATING

CUSTOM-BUILT DOORS & FRAMES

NOTE—SPECIAL ENTRANCES CAN BE MADE TO ARCHITECT'S DESIGN FROM OUR STANDARD CONSTRUCTION

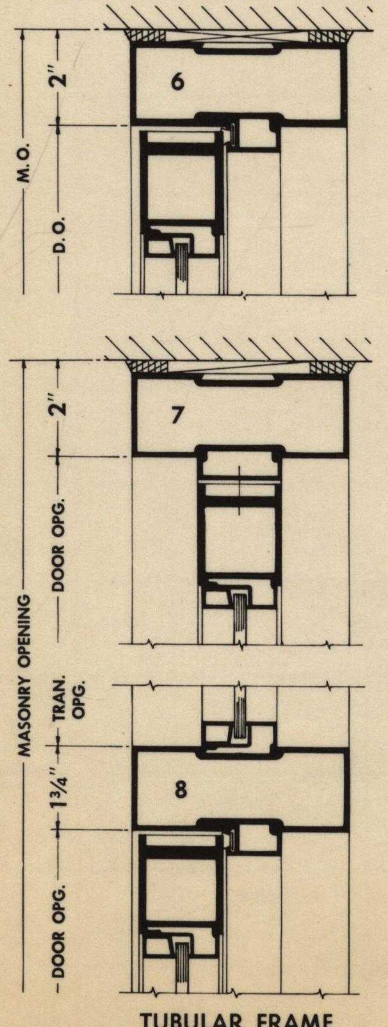


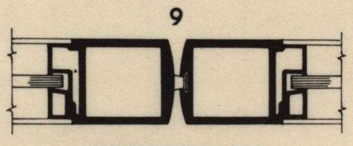
TUBULAR FRAME CONSTRUCTION



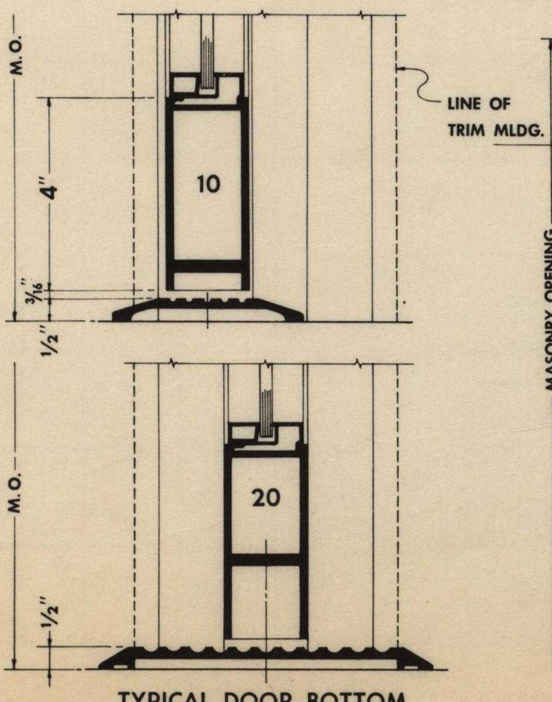
CHANNEL FRAME CONSTRUCTION

(HORIZONTAL SECTIONS)

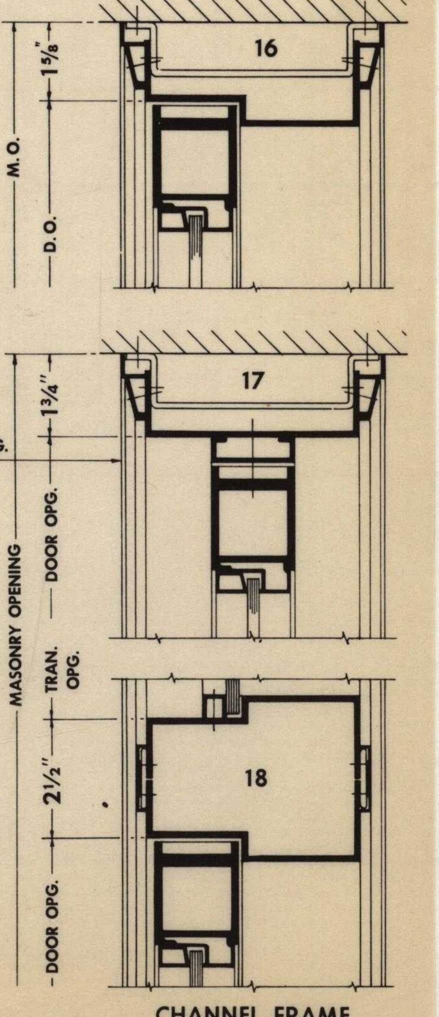




MEETING RAILS



TYPICAL DOOR BOTTOM RAILS & THRESHOLDS

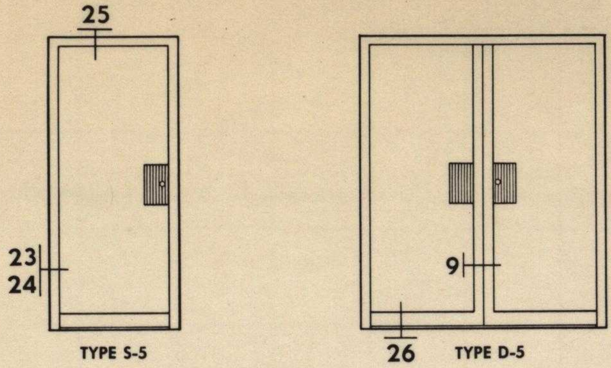


TUBULAR FRAME CONSTRUCTION

CHANNEL FRAME CONSTRUCTION

TYPICAL DETAILS

SCALE 3" = 1'-0"

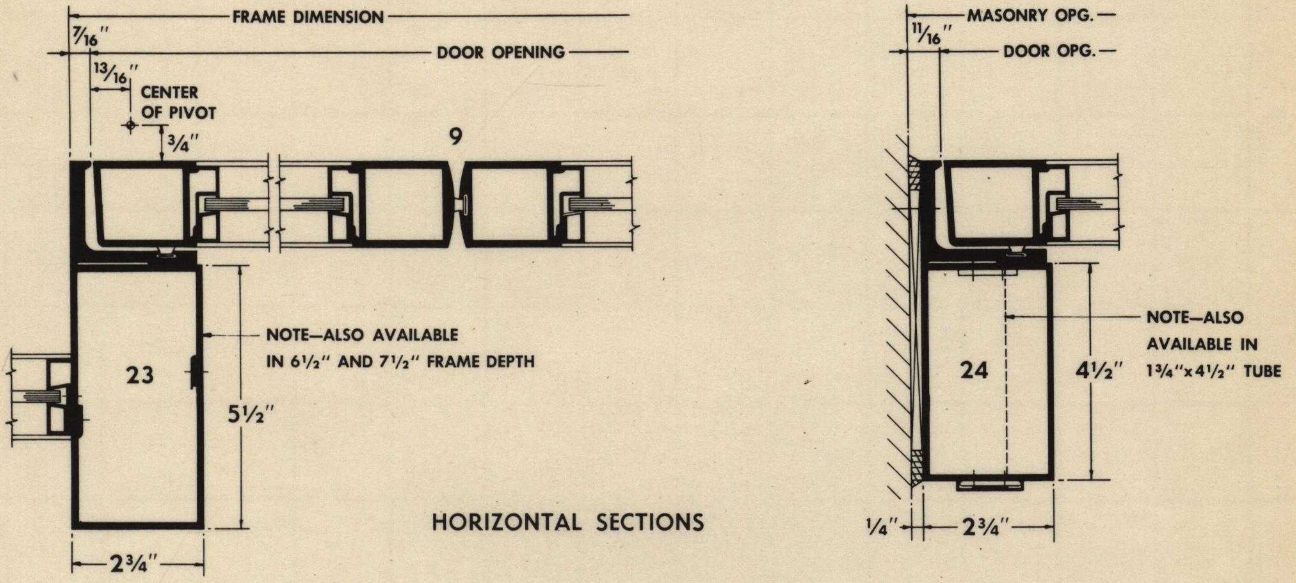


TYPE S-5

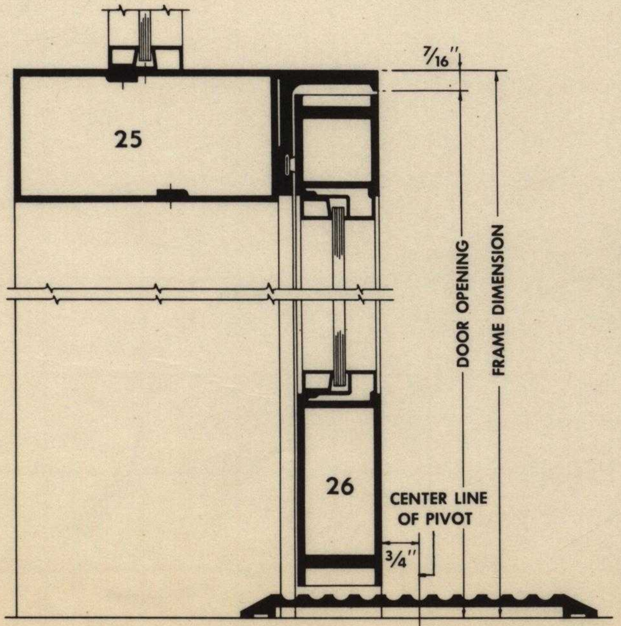
TYPE D-5

HARDWARE — Concealed Single-Acting Floor Check, Push Plate, Pull Handle, Dead Bolt Lock, Top and Bottom Flush Bolts and 7½″ Threshold.

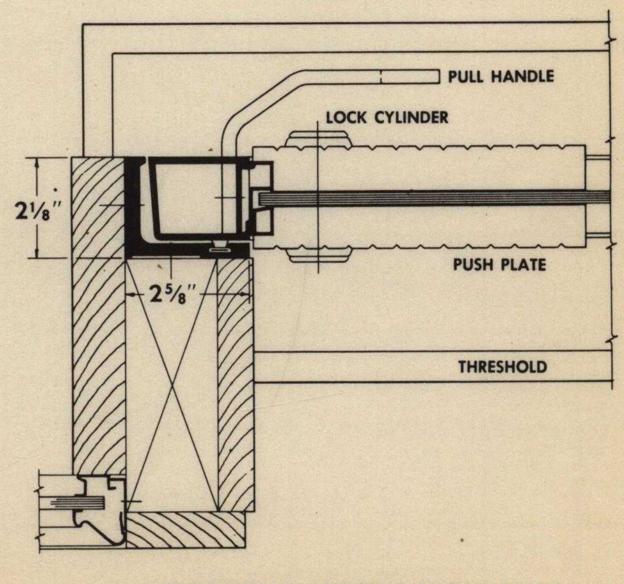
TYPICAL ELEVATIONS



HORIZONTAL SECTIONS

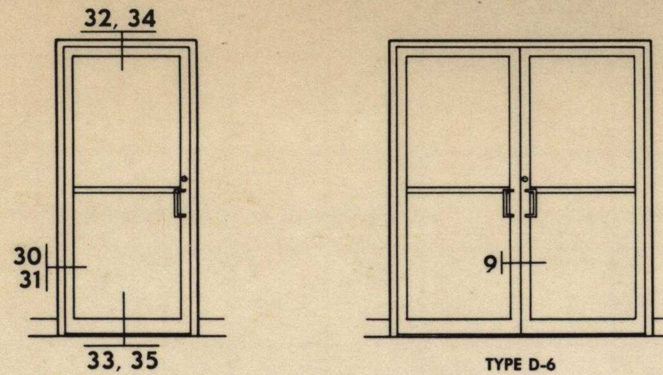


VERTICAL SECTIONS



HORIZONTAL SECTION THRU CLEAR-VIEW UNIT IN A WOOD DOOR POST

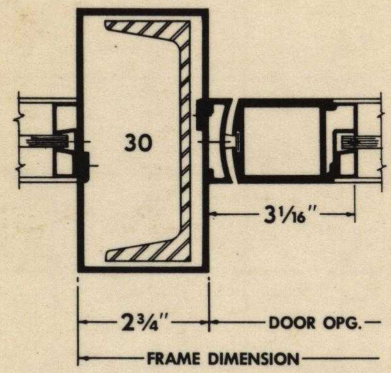
IMPORTANT—SPECIFY SWING OF DOOR

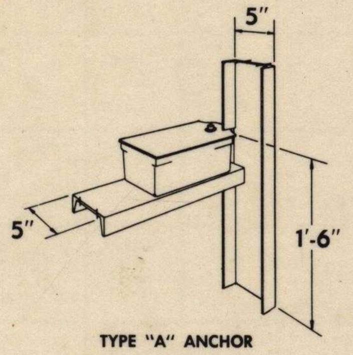


TYPE S-6 TYPICAL ELEVATIONS

TYPE D-6

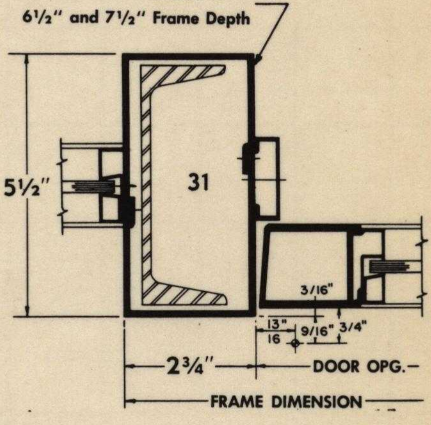
HARDWARE—Concealed Single or Double-Acting Floor Checks, Push Bar, Pull Handle, Dead Bolt Lock, Top and Bottom Flush Bolts and 7 1/2" Threshold.

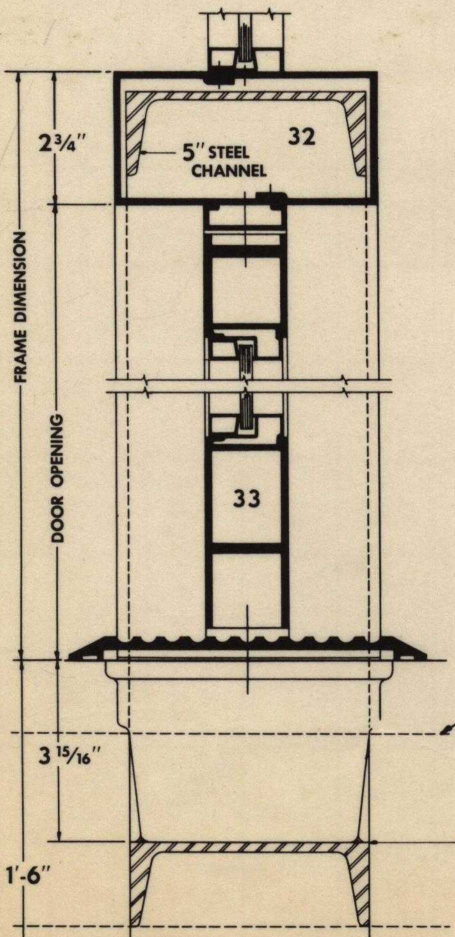




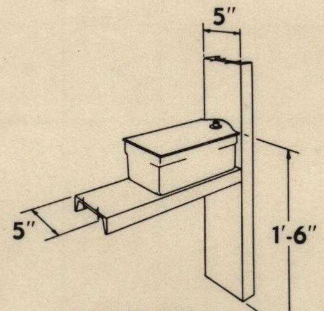
TYPE "A" ANCHOR FOR OFFSET HUNG DOOR

NOTE — Also available in 6 1/2" and 7 1/2" Frame Depth

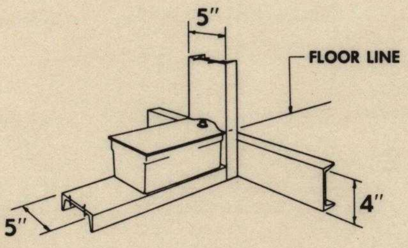




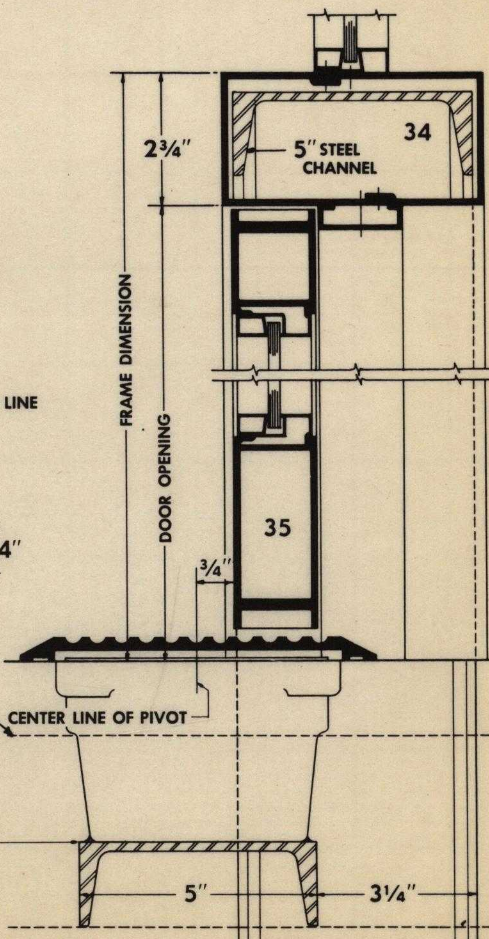
SECTION THRU CENTER HUNG DOOR



TYPE "B" ANCHOR FOR CENTER HUNG DOOR

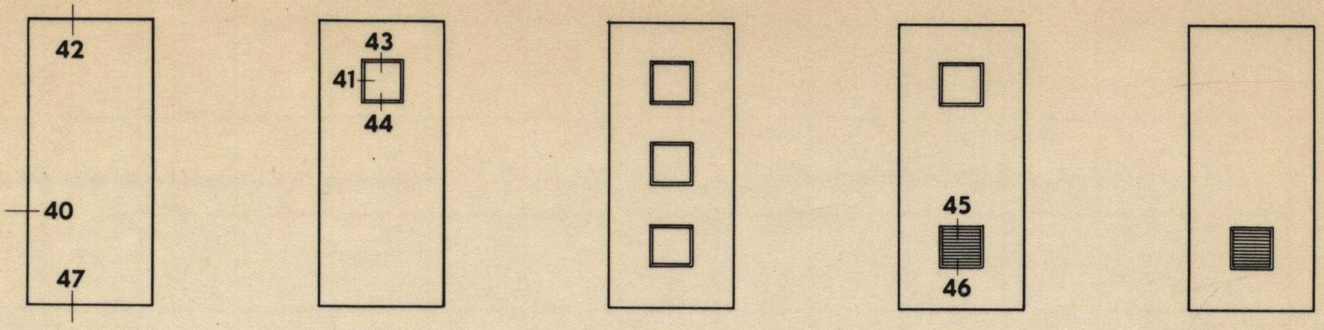


TYPE "C" ANCHOR FOR CENTER HUNG DOOR. SIMILAR CONSTRUCTION CAN BE USED FOR OFFSET HUNG DOOR



SECTION THRU OFFSET HUNG DOOR

NOTE — Floor Checks are to be welded to Steel Channels

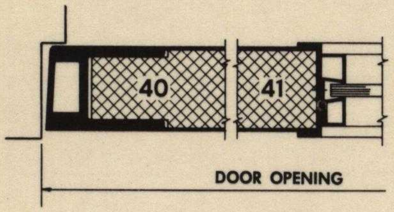


TYPE S-7 TYPE S-8 TYPE S-9 TYPE S-10 TYPE S-11

TYPICAL ELEVATIONS

NOTE—DOORS CAN BE FURNISHED WITH EITHER PLAIN OR HYLITE SHEET FACING. DOORS WILL FIT STANDARD FRAMES.

SUBSTITUTE LETTER "D" FOR "S" IN SPECIFYING DOUBLE DOORS

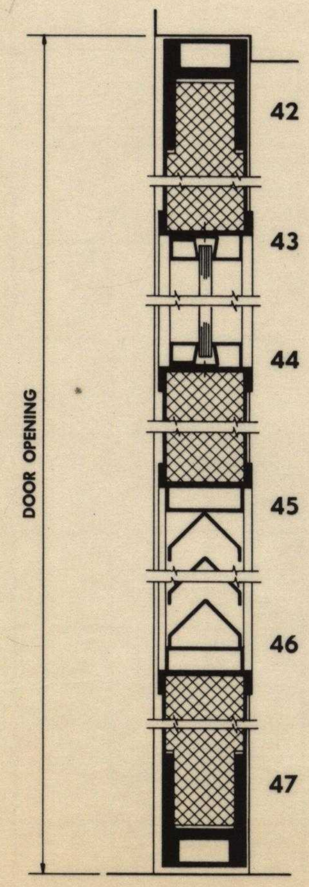


HORIZONTAL SECTION

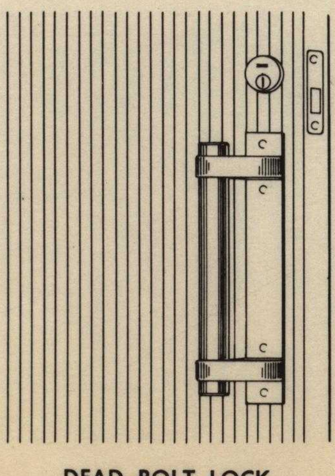
STANDARD SIZES

SINGLE DOORS	DOUBLE DOORS
2'-8"x7'-0"	5'-0"x7'-0"
3'-0"x7'-0"	6'-0"x7'-0"
3'-6"x7'-0"	
4'-0"x7'-0"	

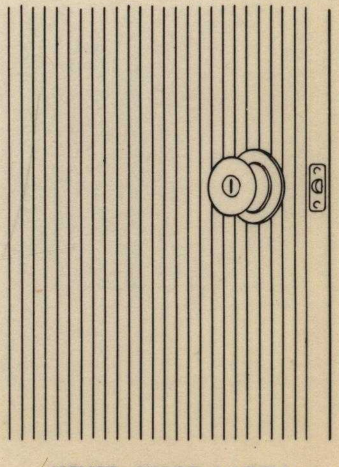
STANDARD HARDWARE — 1½ pair of Butt Hinges per Door, Keyed Knob Latch or Dead Bolt Lock with Pull Handle and Push Plate, Overhead Door Closer, Top and Bottom Flush Bolts and 4" Threshold. Stock Doors can also be furnished on Single or Double-Acting Floor Checks with or without 7½" Aluminum Threshold.



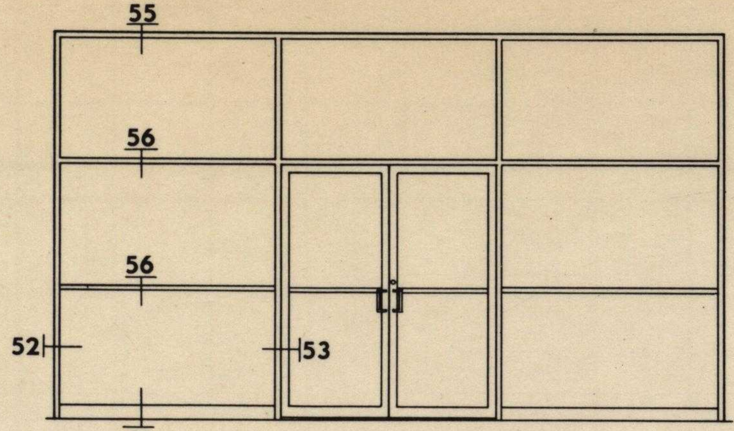
VERTICAL SECTIONS



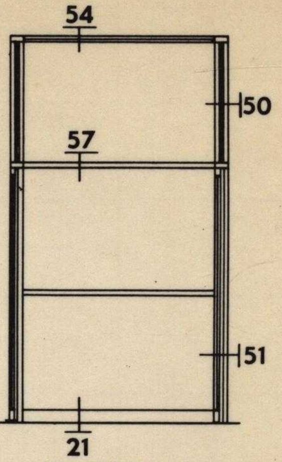
DEAD BOLT LOCK
& PULL HANDLE



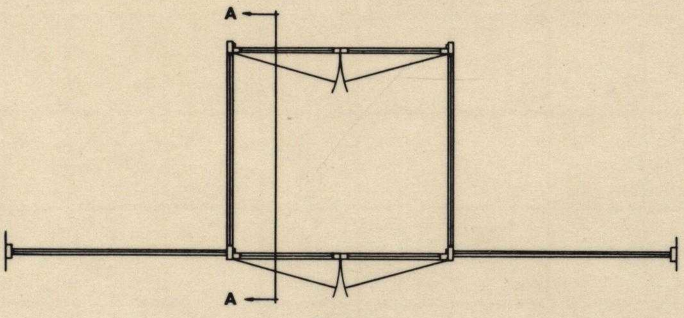
KEYED KNOB LATCH



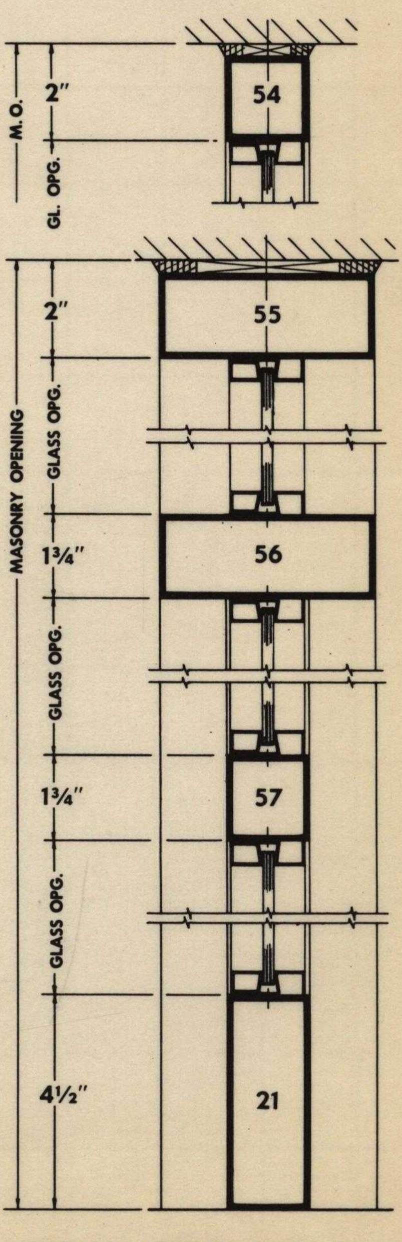
KEY ELEVATION



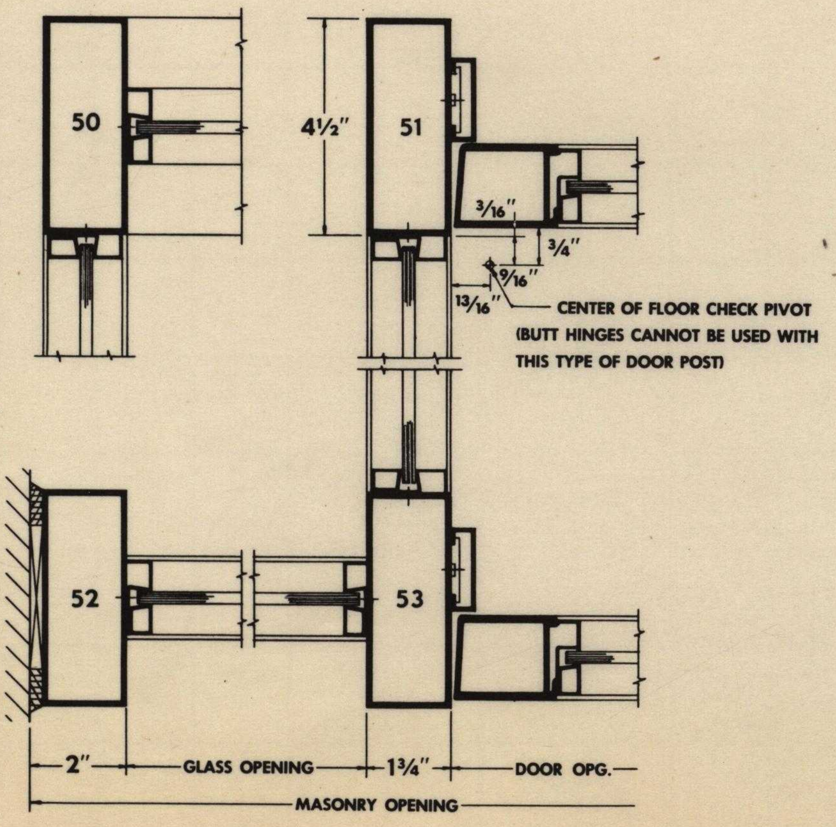
SECTION A-A



PLAN



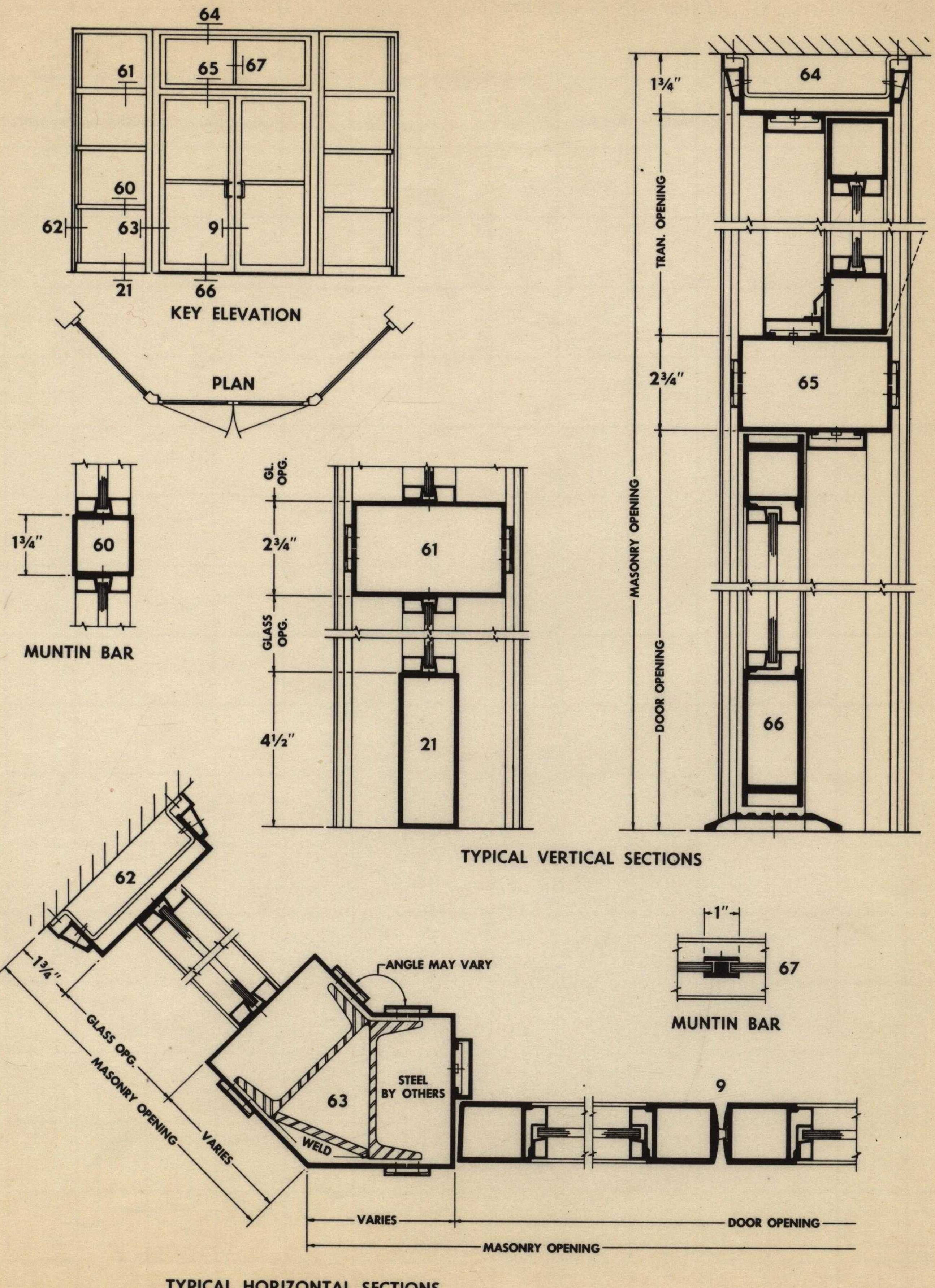
TYPICAL VERTICAL SECTIONS THRU SIDELIGHT & TRANSOM



TYPICAL HORIZONTAL SECTIONS

VESTIBULE ENTRANCE

SCALE 3″ = 1′-0″



KEY ELEVATION

PLAN

MUNTIN BAR

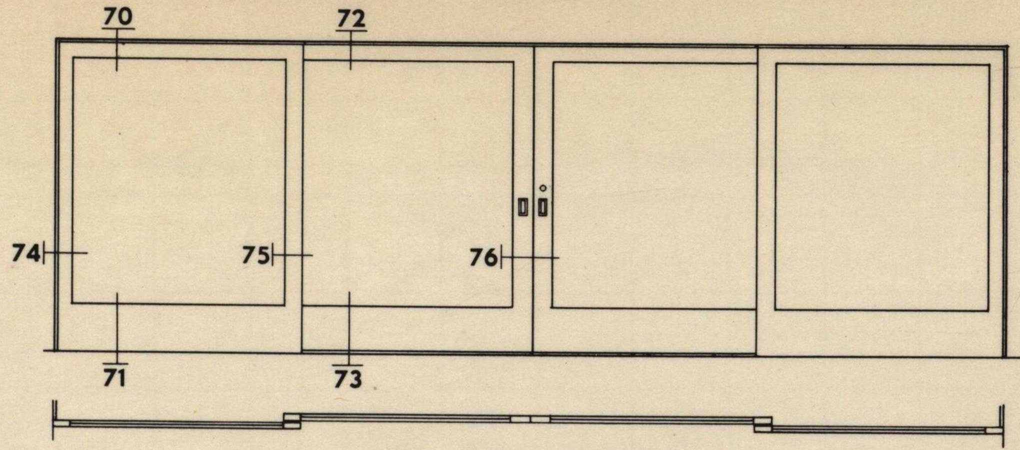
TYPICAL VERTICAL SECTIONS

MUNTIN BAR

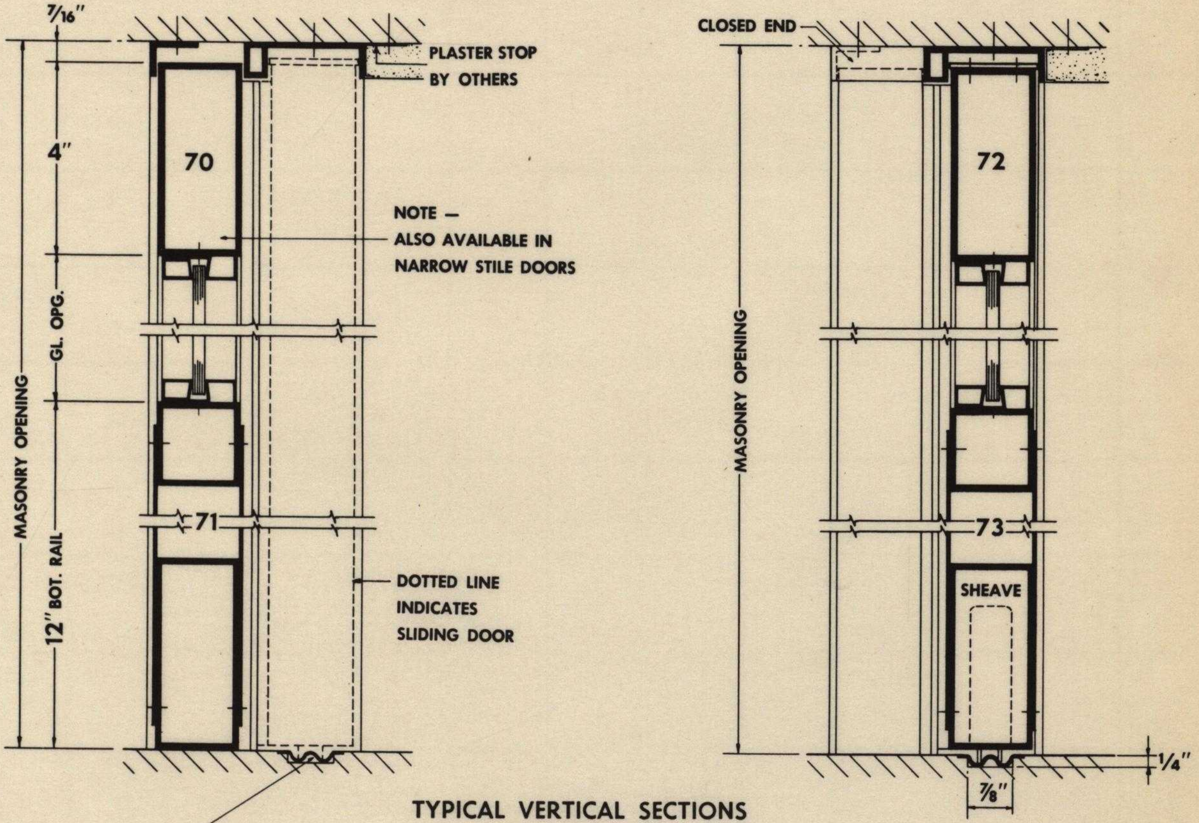
TYPICAL HORIZONTAL SECTIONS

CORNER ENTRANCE

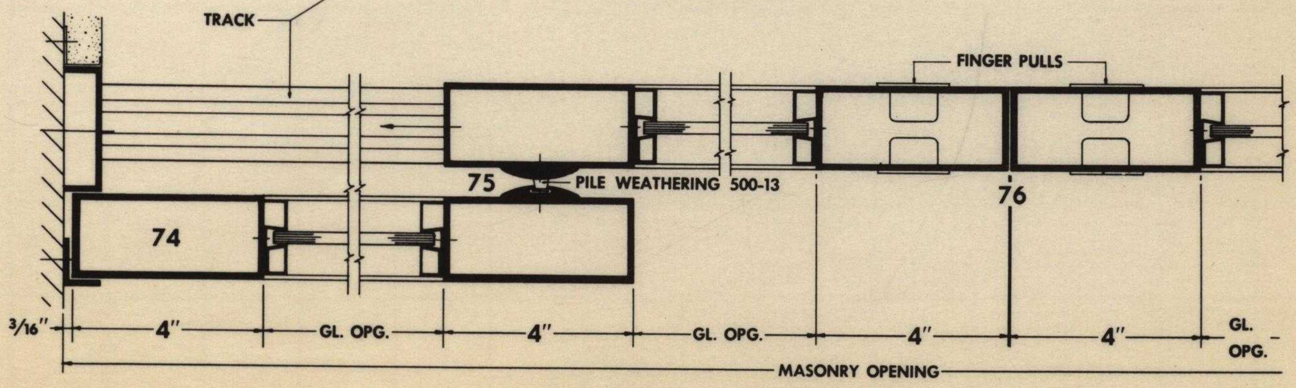
SCALE 3" = 1'-0"



KEY PLAN & ELEVATION



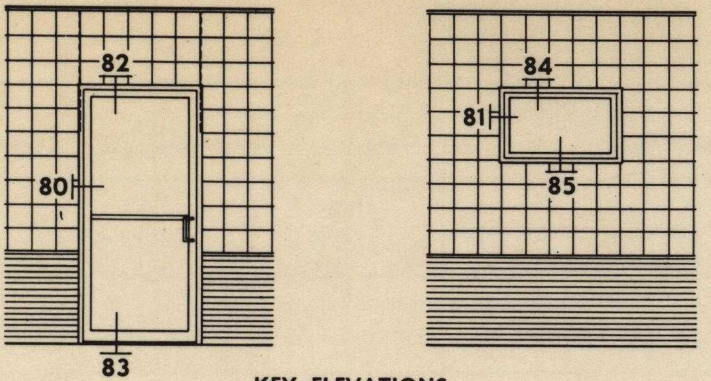
TYPICAL VERTICAL SECTIONS



TYPICAL HORIZONTAL SECTIONS

SLIDING DOORS

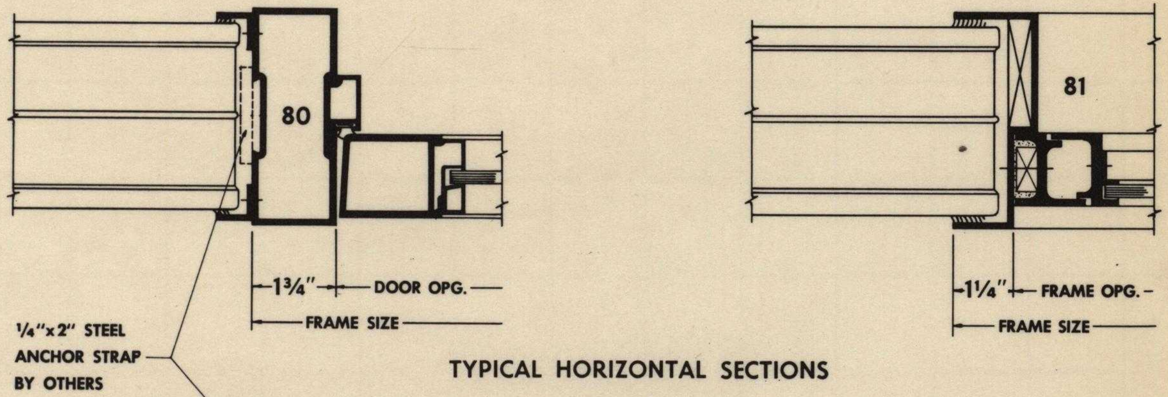
SCALE 3" = 1'-0"



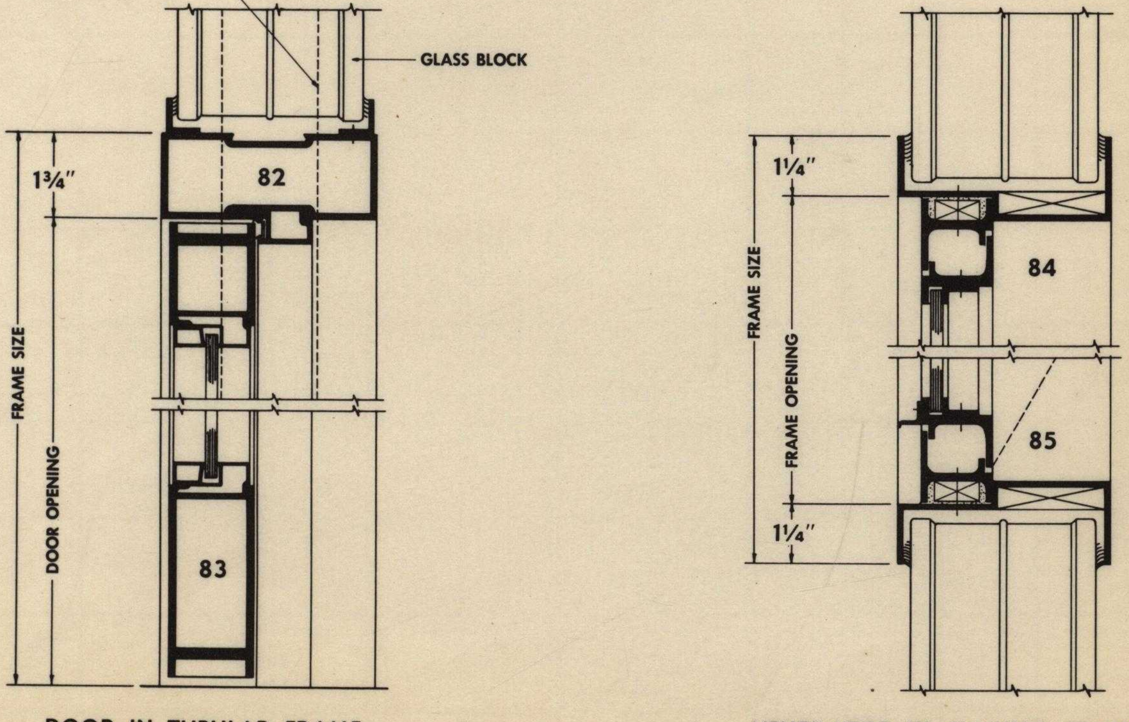
KEY ELEVATIONS

Illustrations show Stock Entrance with Back Enclosure and Ventilator Sash with Channel Frame No. 400-14 set in a Glass Block Opening.

Other arrangements optional.



TYPICAL HORIZONTAL SECTIONS



DOOR IN TUBULAR FRAME

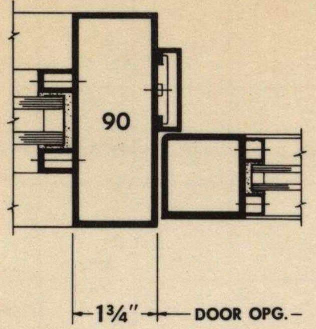
VENTILATOR IN CHANNEL FRAME

TYPICAL VERTICAL SECTIONS

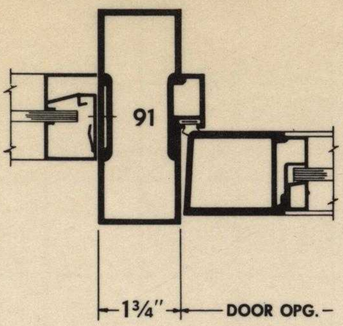
GLASS BLOCK CONSTRUCTION

SCALE 3" = 1'-0"

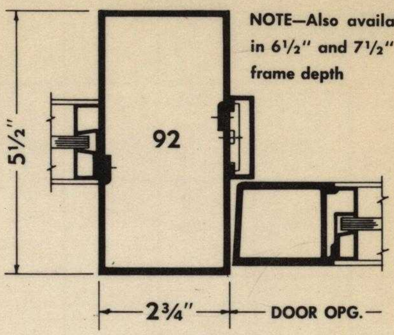
SPECIAL MULLION CONSTRUCTION



MULLION WITH TWINDOW

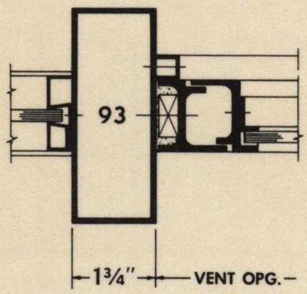


MULLION WITH SASH NO. 72-A

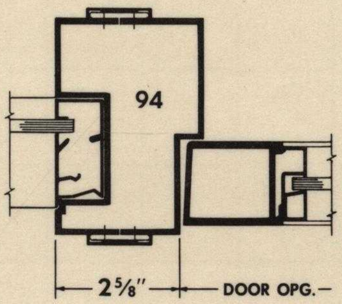


NOTE—Also available in 6½" and 7½" frame depth

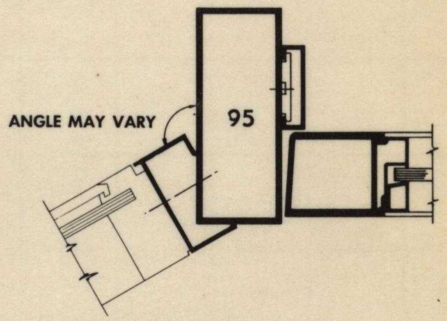
HEAVY MULLION



MULLION WITH VENTILATOR

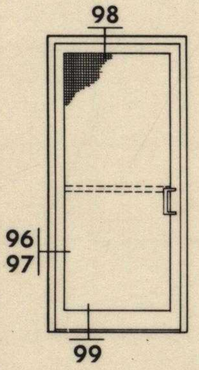


MULLION WITH RECESSED SASH NO. 17



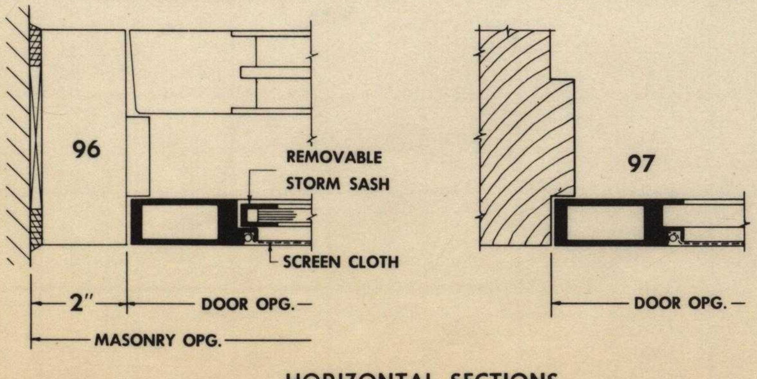
MULLION WITH SASH ADAPTOR

SCREEN DOOR WITH STORM SASH

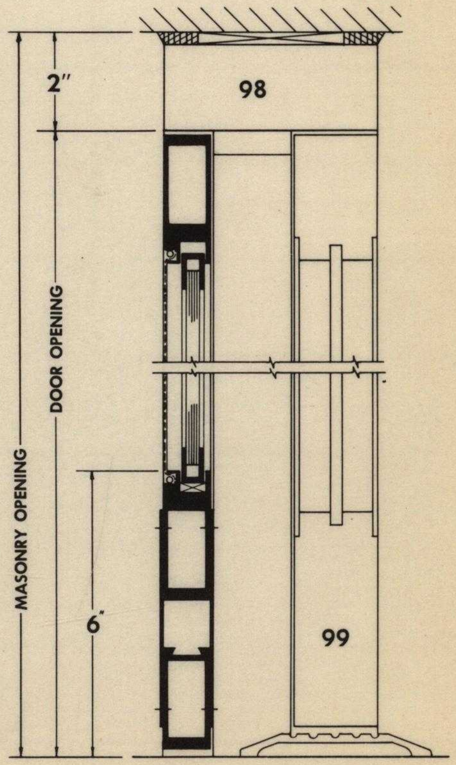


KEY ELEVATION

HARDWARE — 1½ pair of Butt Hinges, Overhead Door Closer, Push Bar and Pull Handle. Latch Lock set may be substituted for Push Bar and Pull.
IMPORTANT — Specify swing of door.



HORIZONTAL SECTIONS



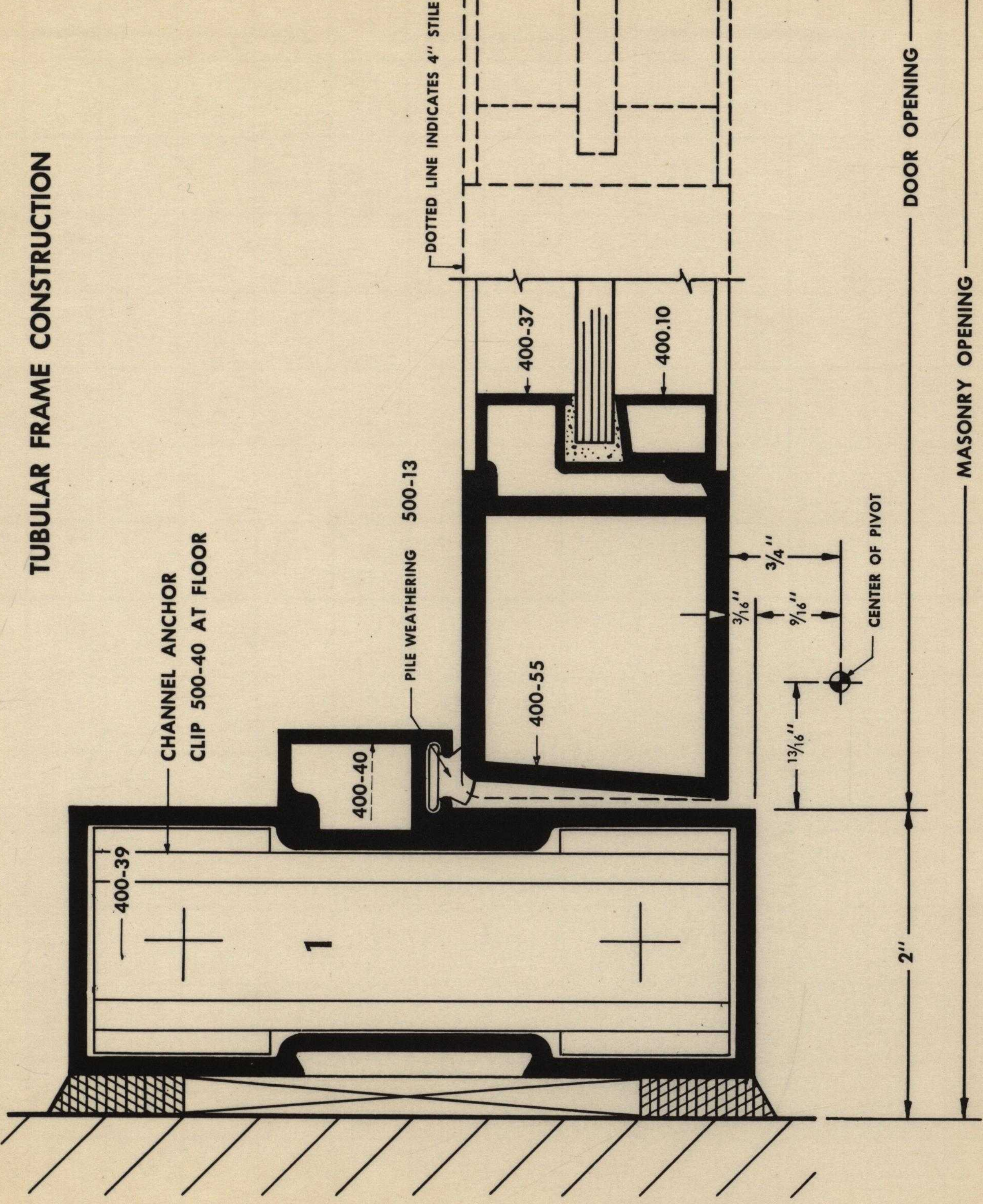
VERTICAL SECTIONS

NOTE—In ordering Screen Doors specify Door Opening Size.

MULLIONS & SCREEN DOOR

SCALE 3" = 1'-0"

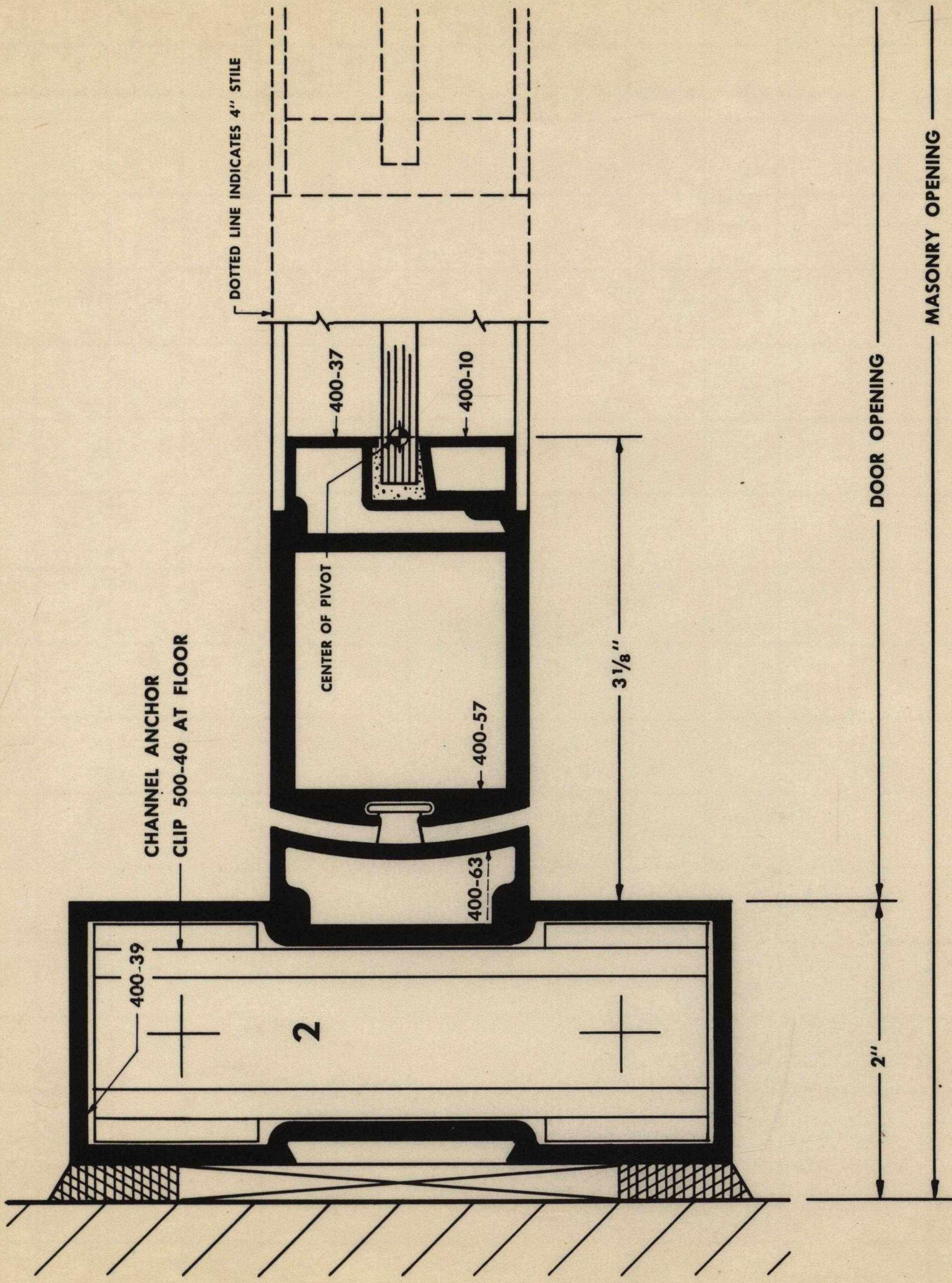
TUBULAR FRAME CONSTRUCTION



SIDE JAMB

FULL SIZE SECTION

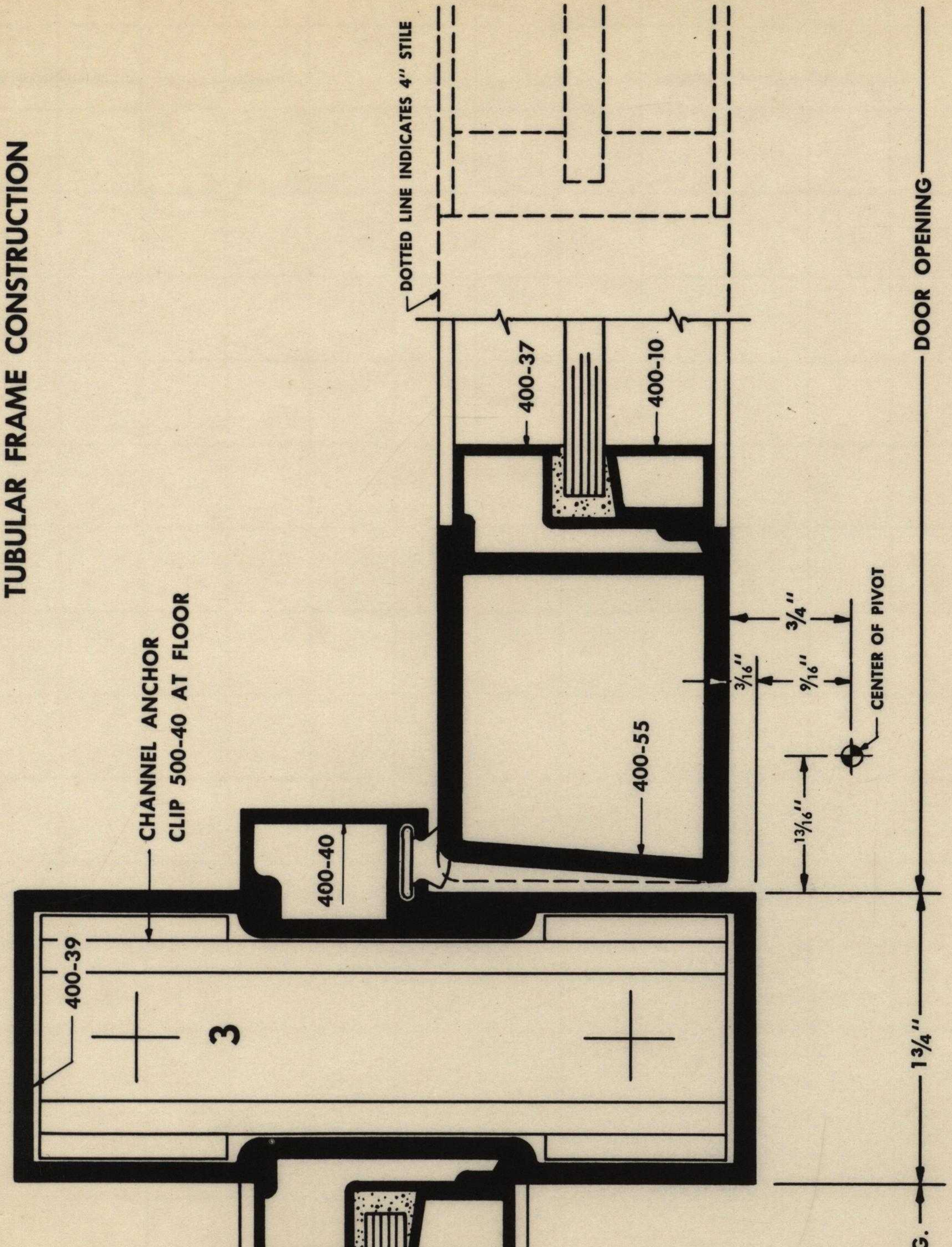
TUBULAR FRAME CONSTRUCTION



SIDE JAMB

FULL SIZE SECTION

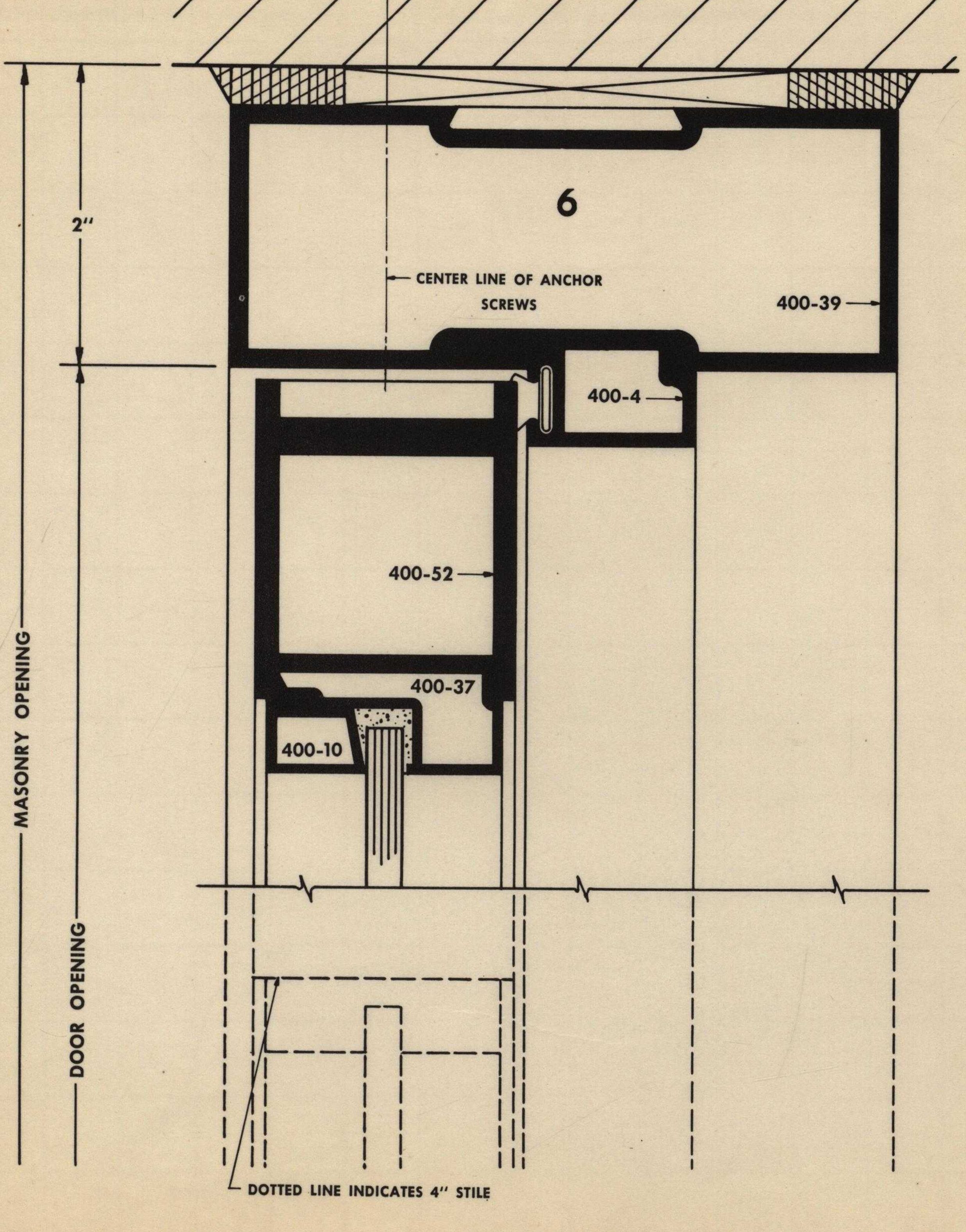
TUBULAR FRAME CONSTRUCTION



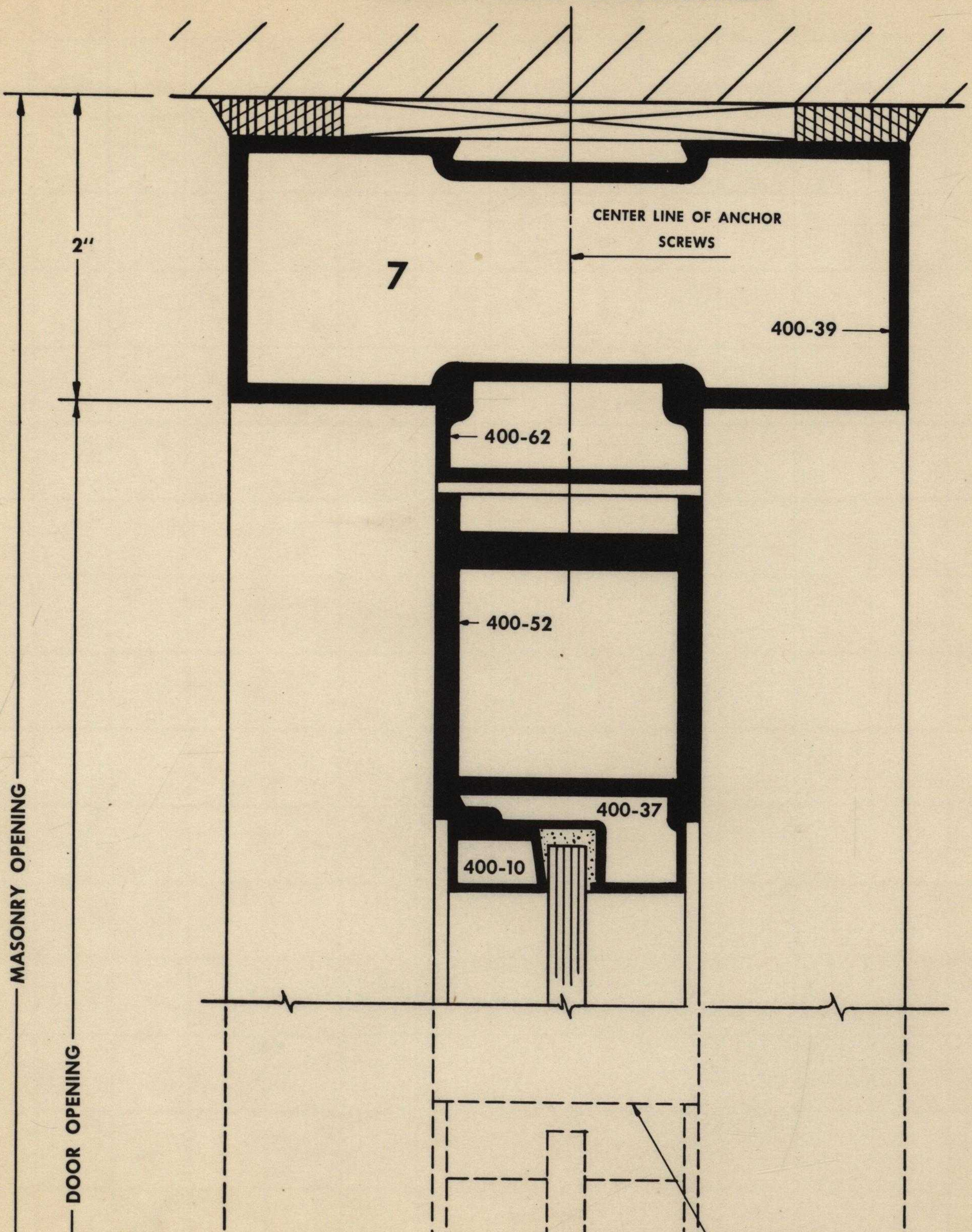
DOOR POST

FULL SIZE SECTION

TUBULAR FRAME CONSTRUCTION

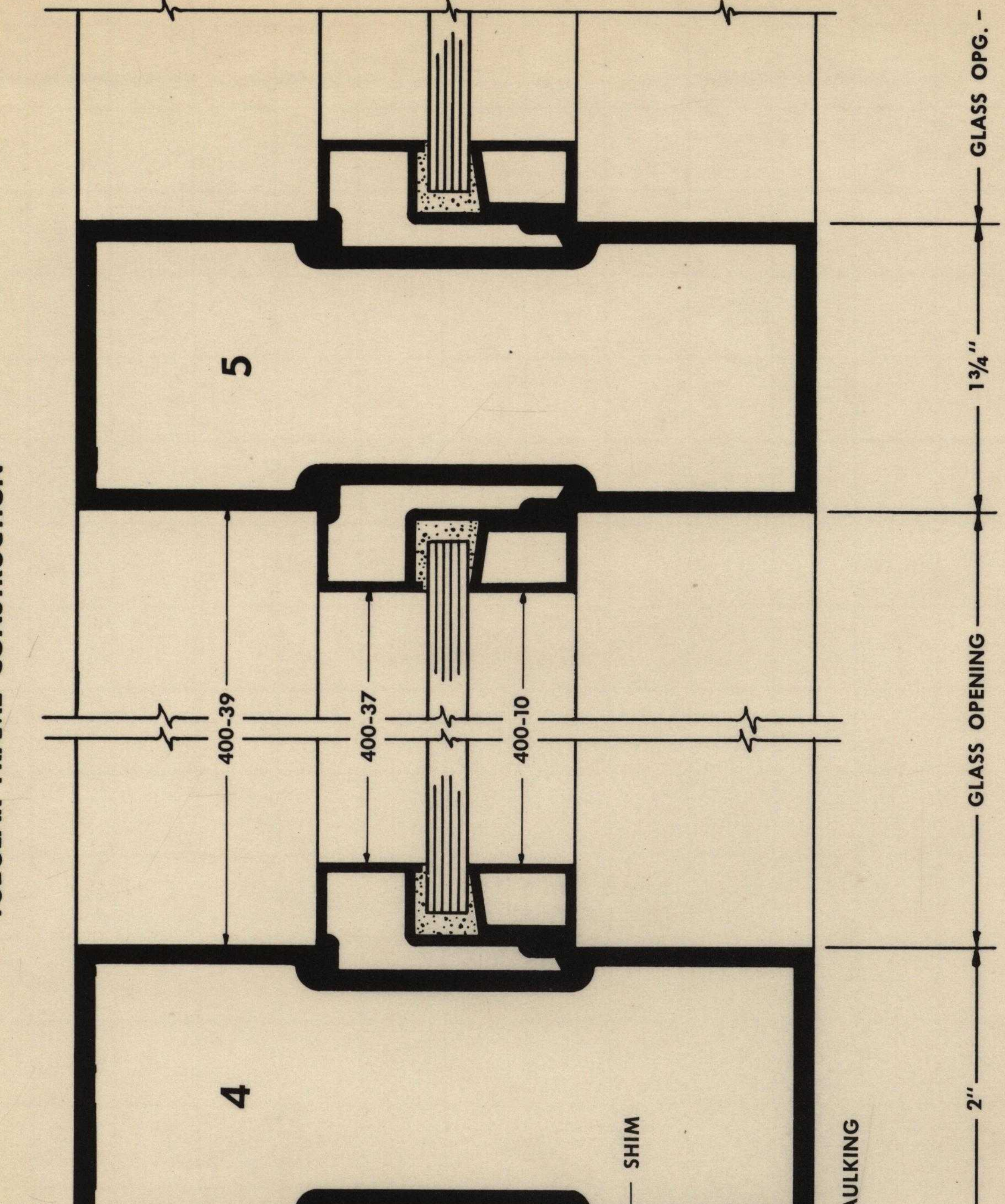


TUBULAR FRAME CONSTRUCTION

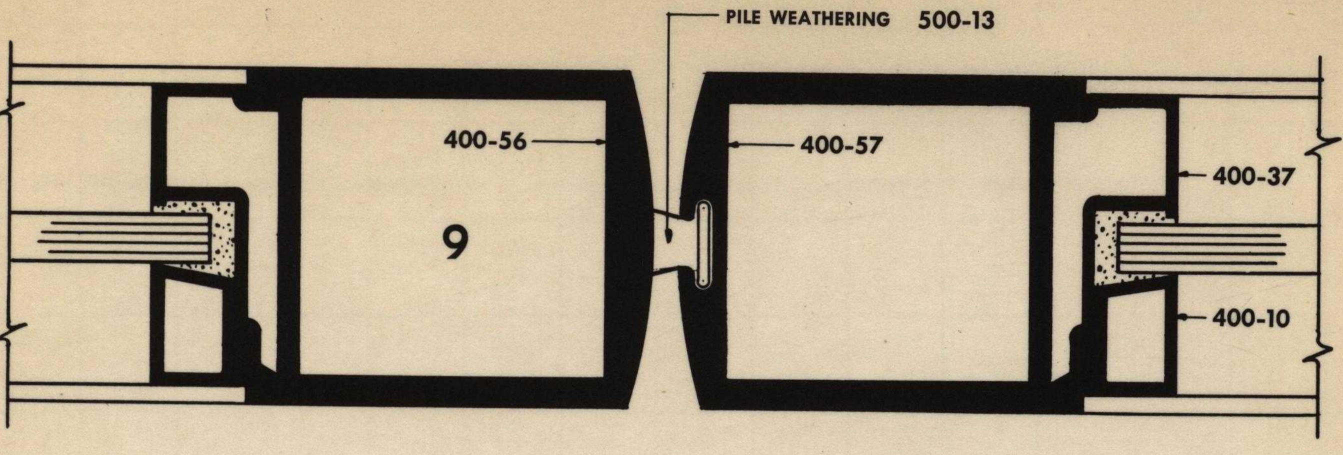


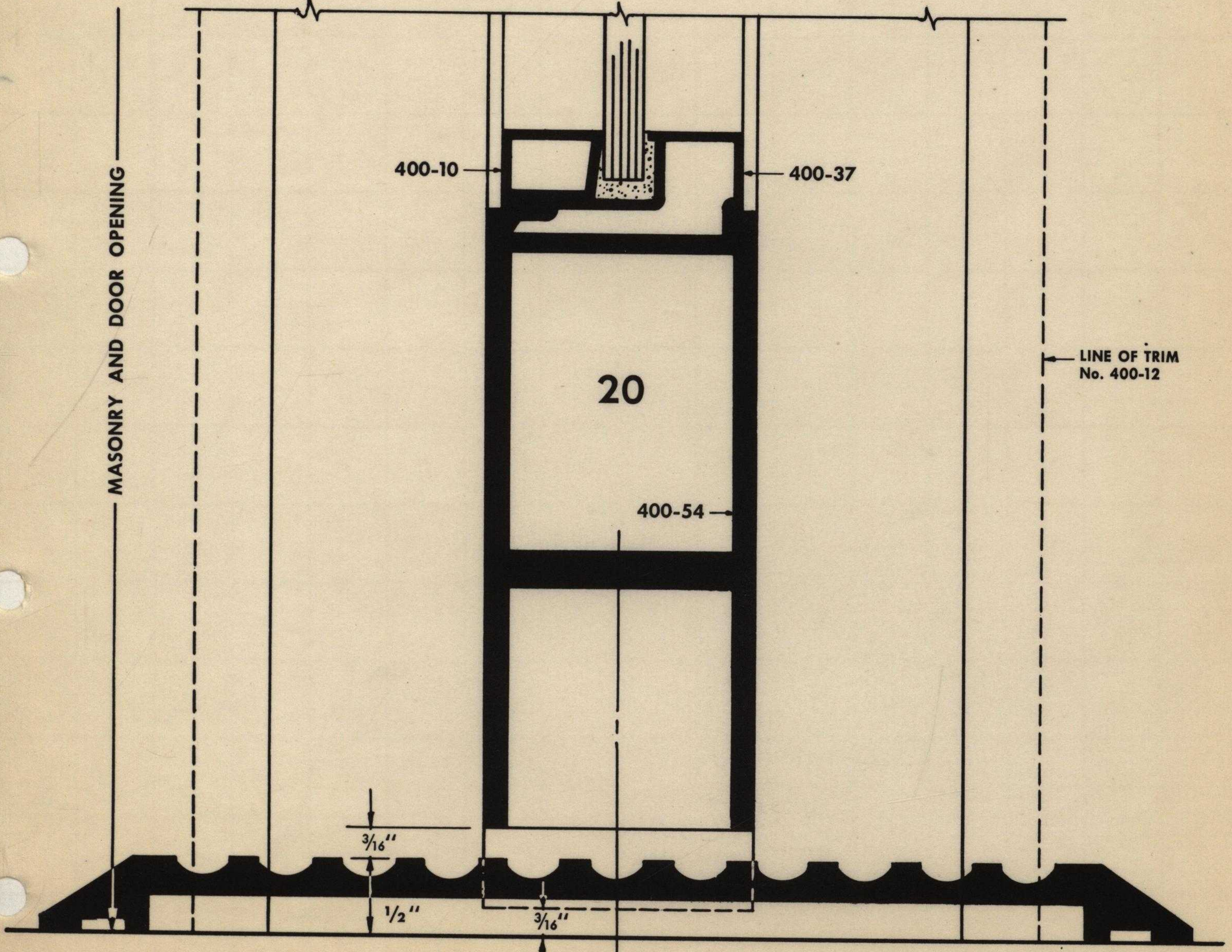
DOTTED LINE INDICATES 4" STILE

TUBULAR FRAME CONSTRUCTION



JAMB, MULLION & TRANSOM BAR

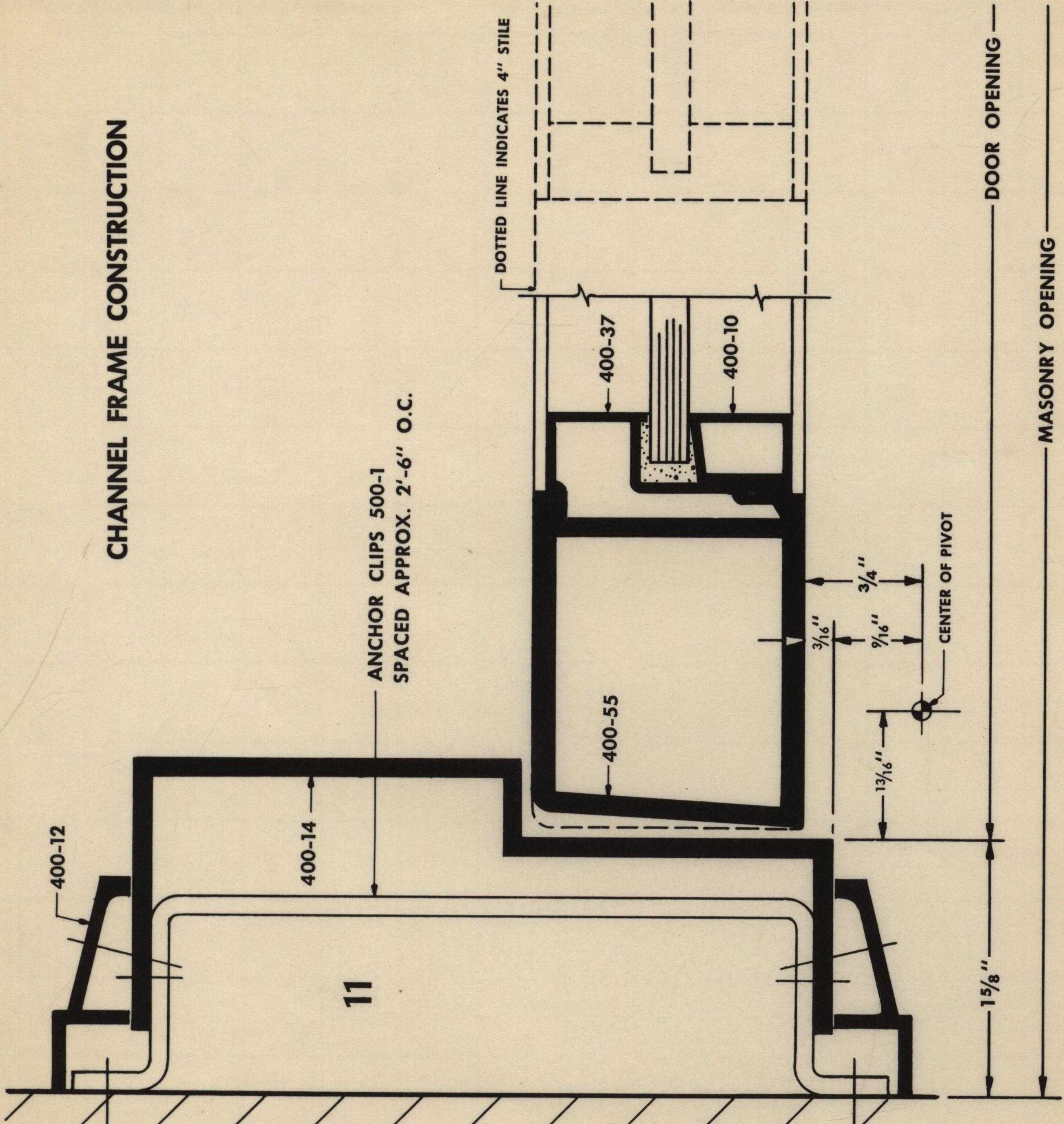




FULL SIZE SECTIONS

MEETING RAILS & BOTTOM RAIL WITH THRESHOLD

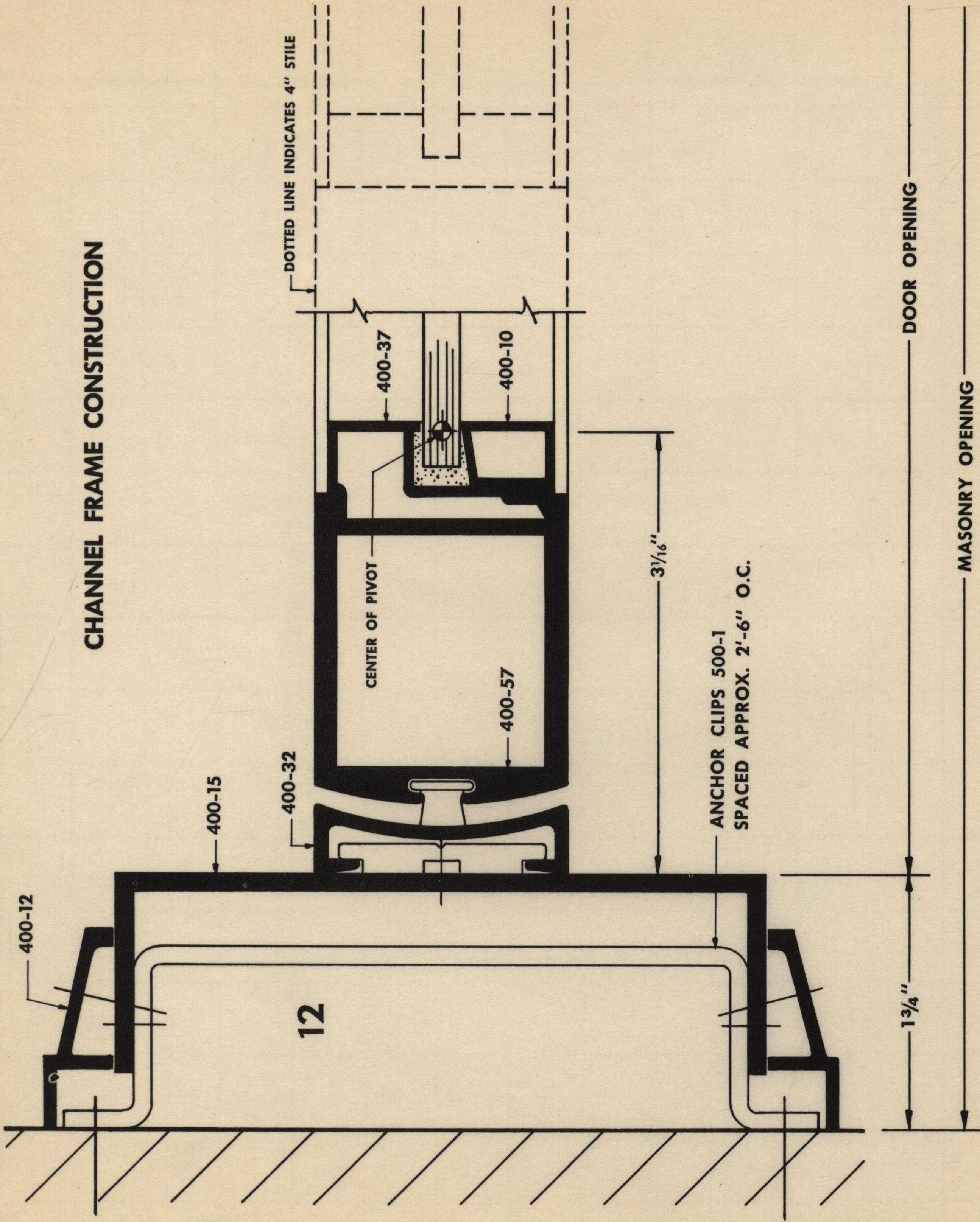
CHANNEL FRAME CONSTRUCTION



SIDE JAMB

FULL SIZE SECTION

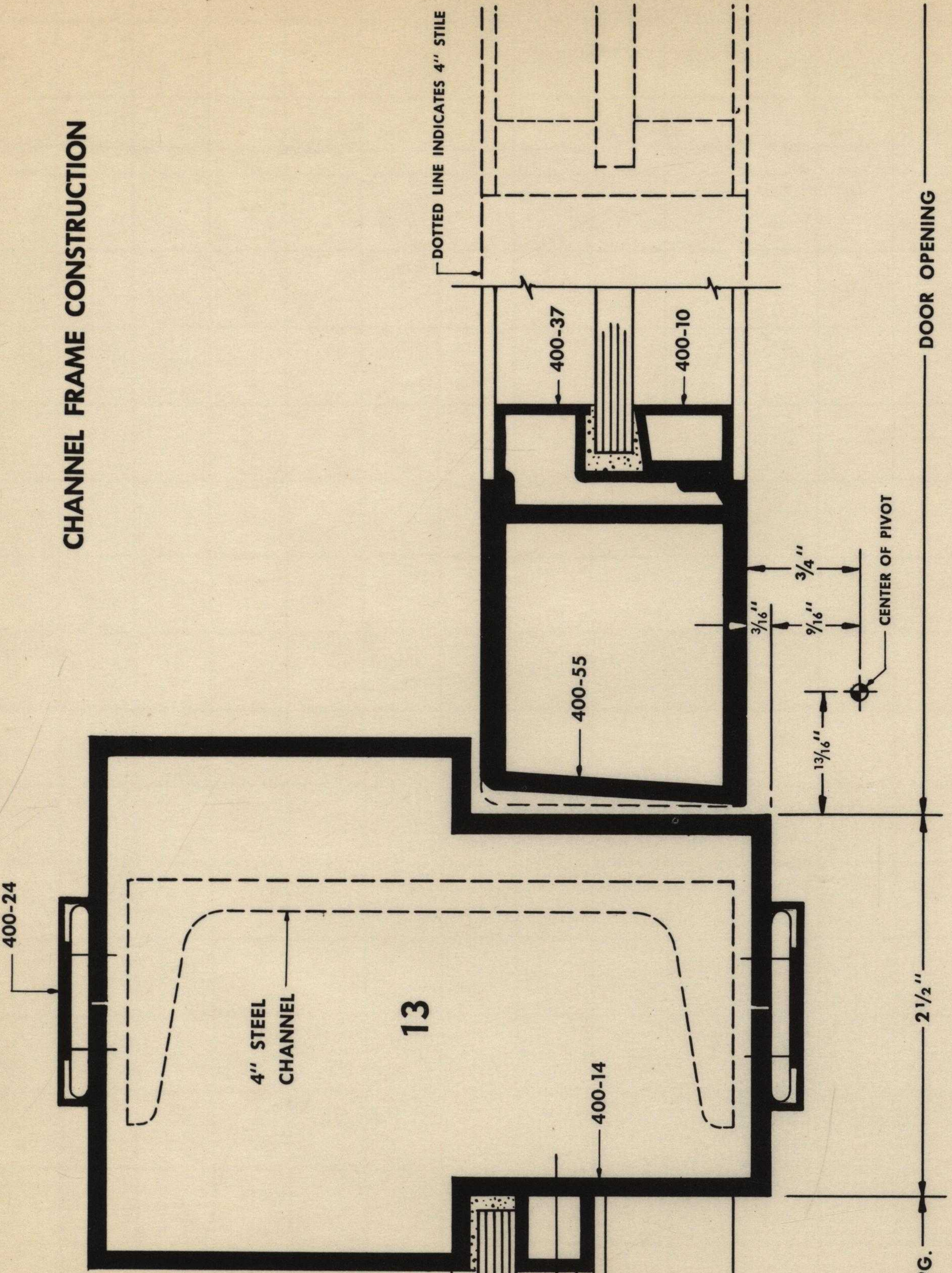
CHANNEL FRAME CONSTRUCTION



SIDE JAMB

FULL SIZE SECTION

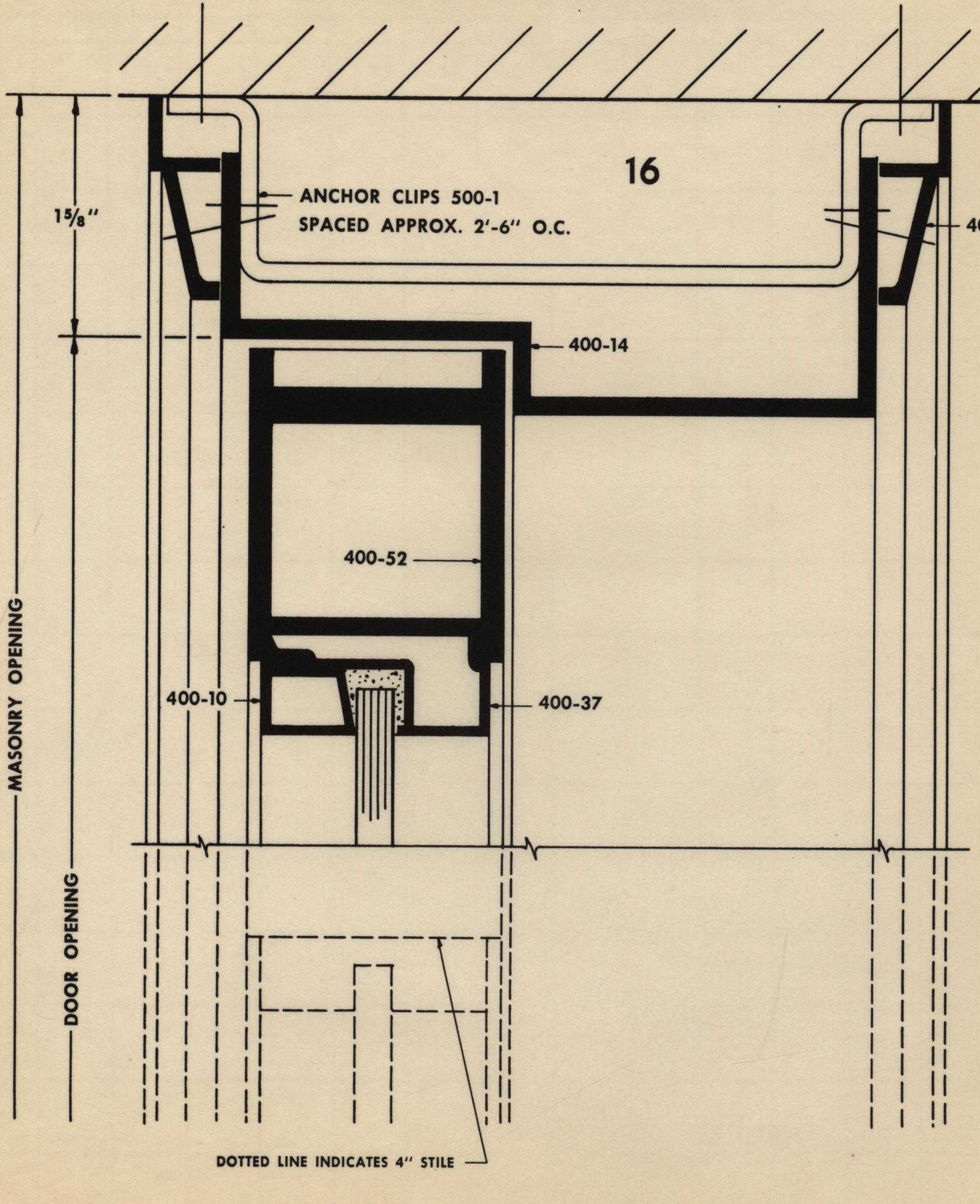
CHANNEL FRAME CONSTRUCTION



DOOR POST

FULL SIZE SECTION

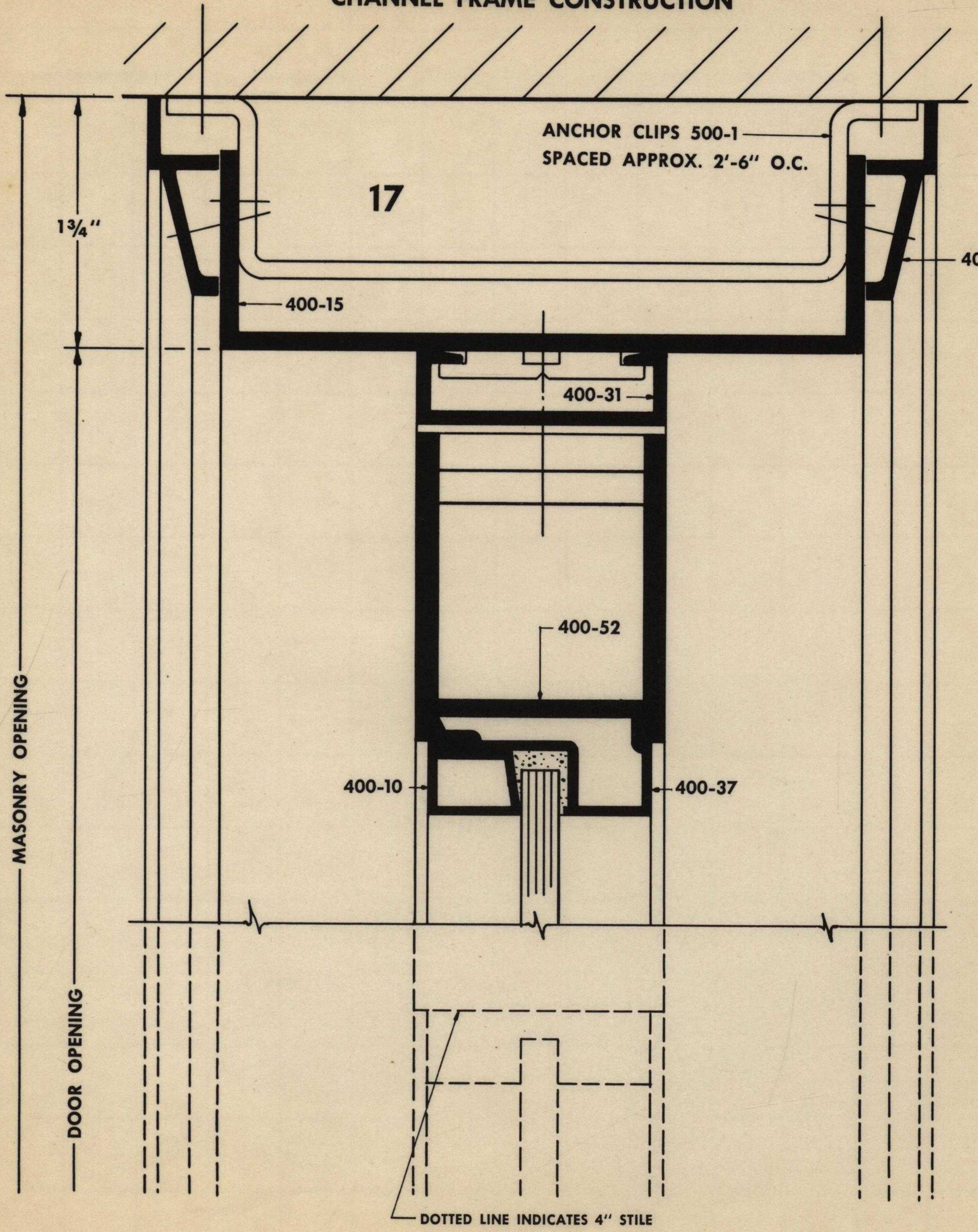
CHANNEL FRAME CONSTRUCTION

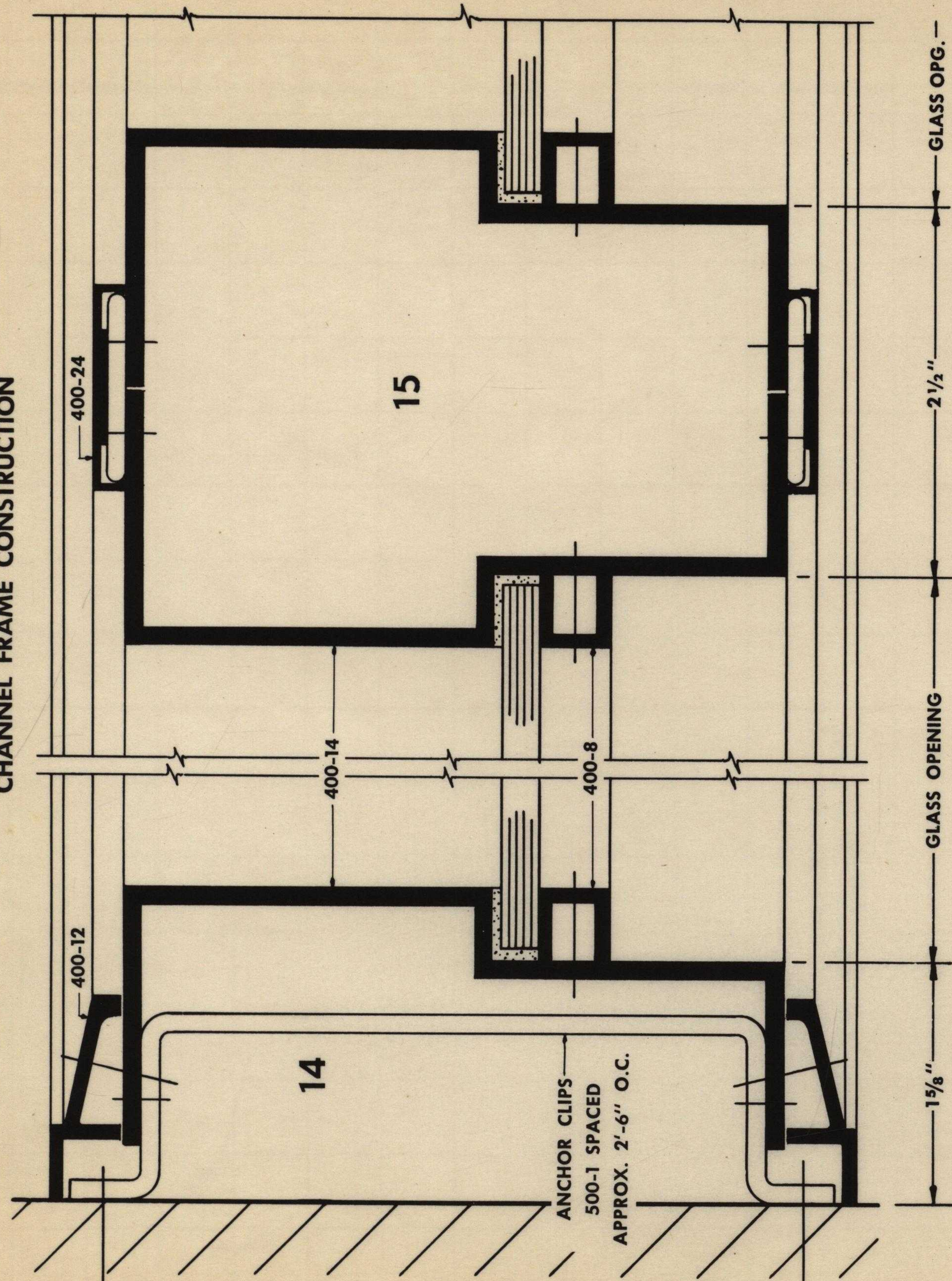


HEAD JAMB

FULL SIZE SECTION

CHANNEL FRAME CONSTRUCTION

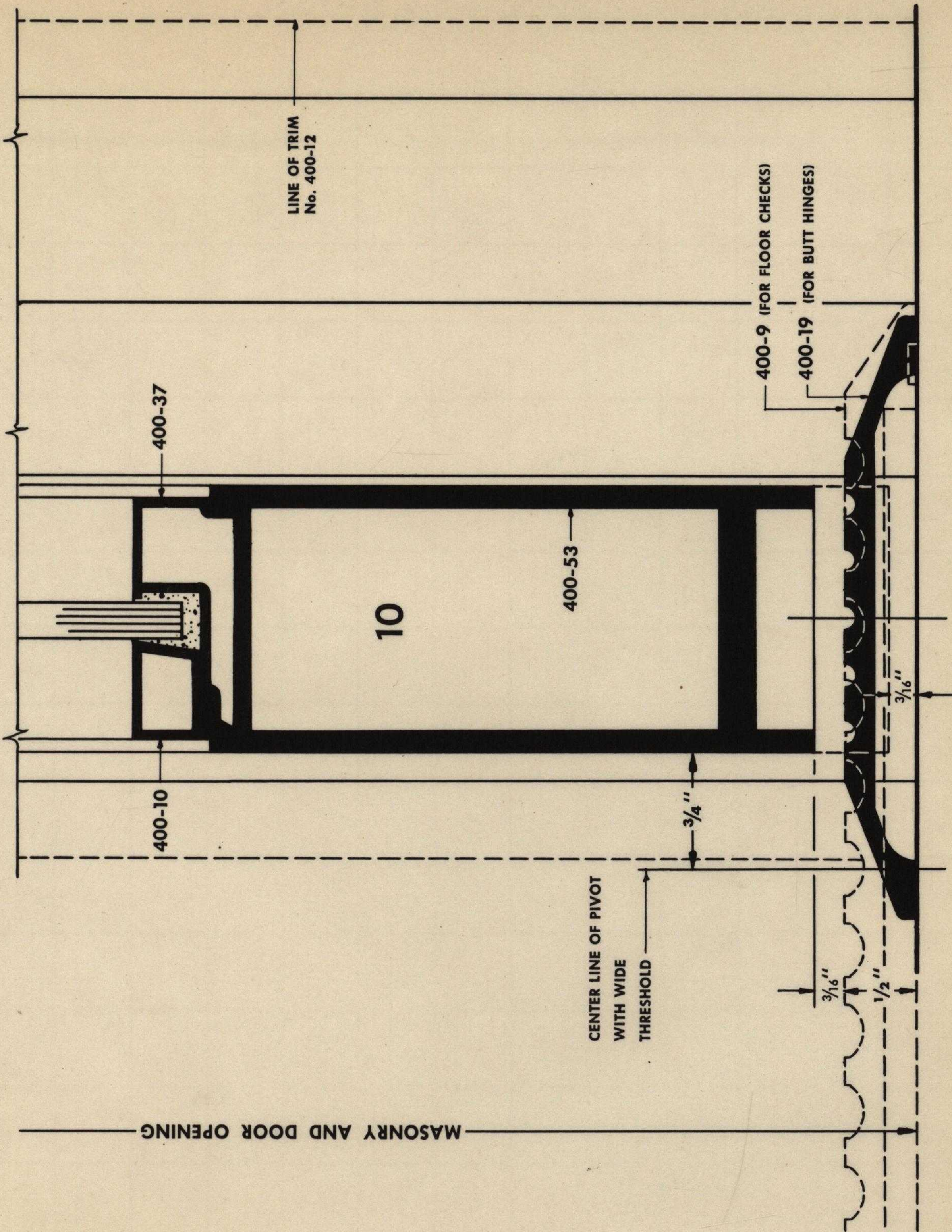




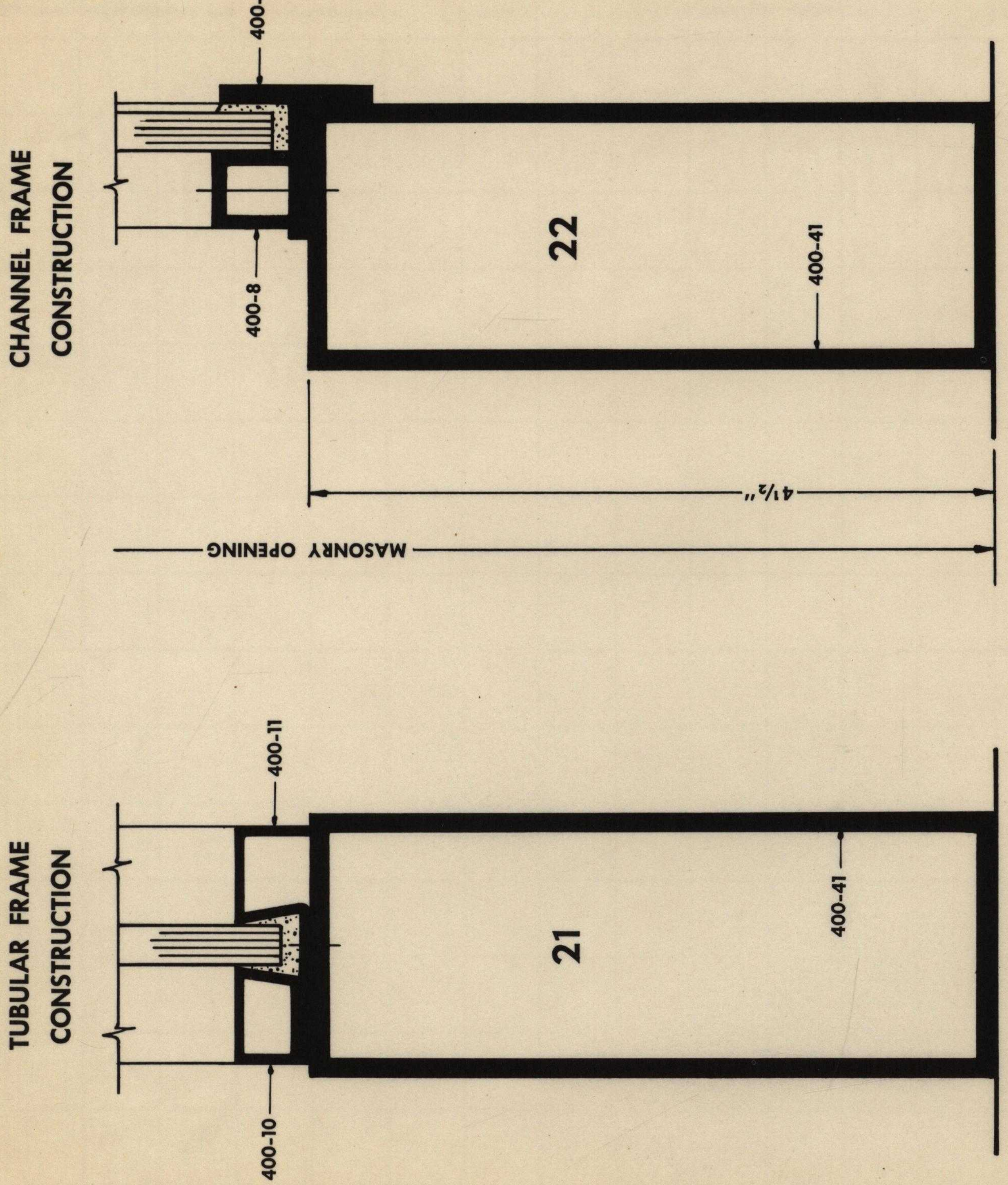
JAMB, MULLION & TRANSOM BAR

FULL SIZE SECTIONS

TUBULAR FRAME CONSTRUCTION

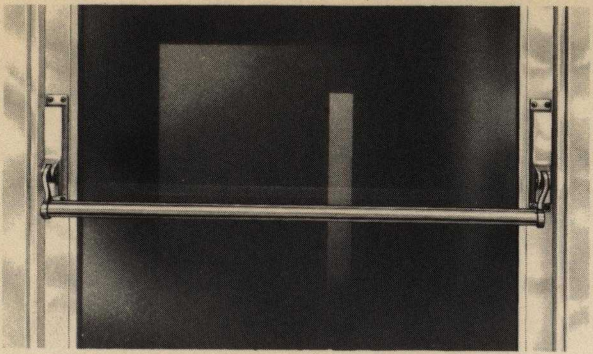


BOTTOM RAIL WITH THRESHOLDS

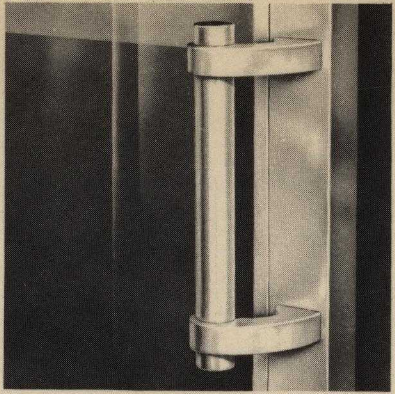


BOTTOM RAILS FOR SIDELIGHT

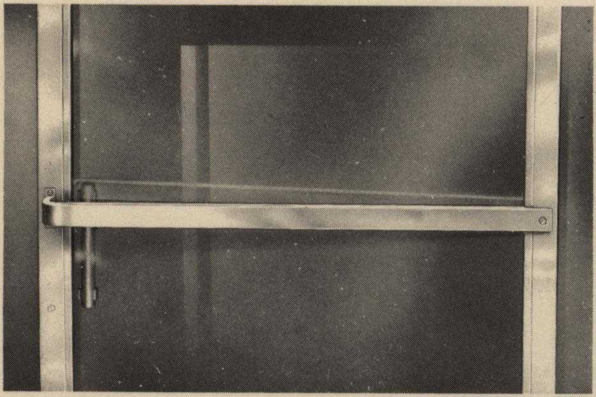
FULL SIZE SECTIONS



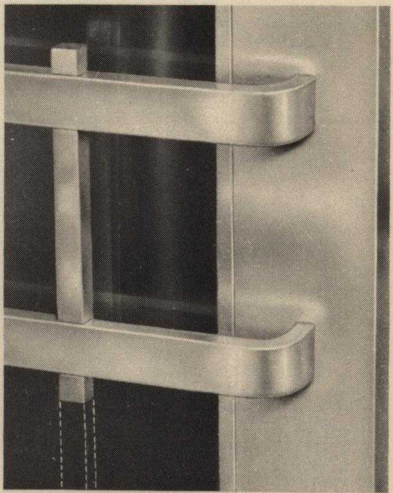
CONCEALED PANIC DEVICE 500-60
(Bolts engage at Head Jamb and Floor)



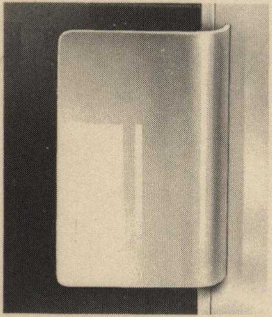
PULL HANDLE 500-5



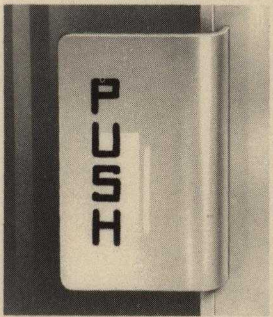
PUSH BAR 500-50 ·



PULL BAR 500-51
With Vertical Bar extended
to bottom rail. Specify 500-52



Plain



"Push" (Engraved)

*PLATES 500-53

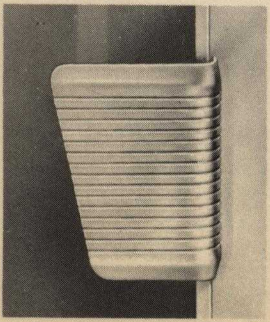


PLATE 500-54

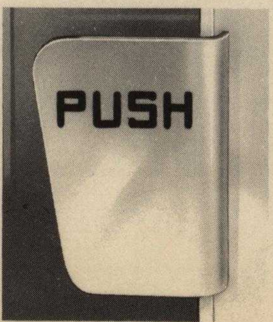
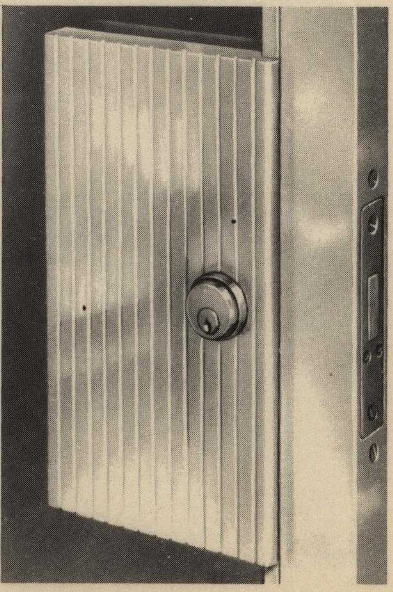
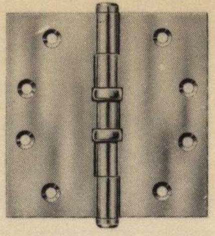


*PLATE 500-55

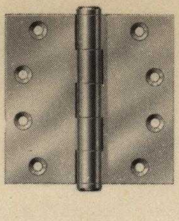


CAST PUSH PLATE 500—17

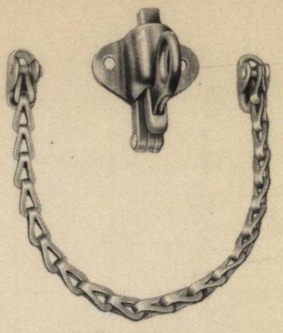
*Plates will be furnished plain unless "Push or Pull"
engraving is specified



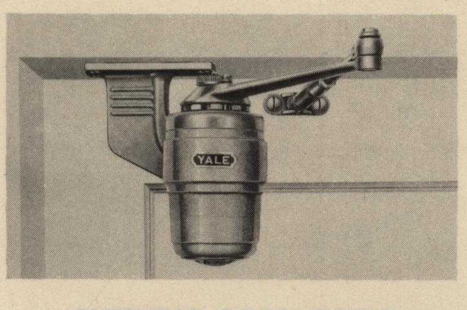
BALL BEARING BUTT HINGE No. 500-25



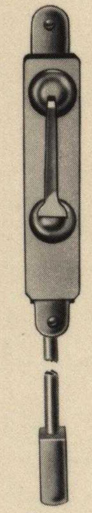
TRANSOM HINGE No. 500-56



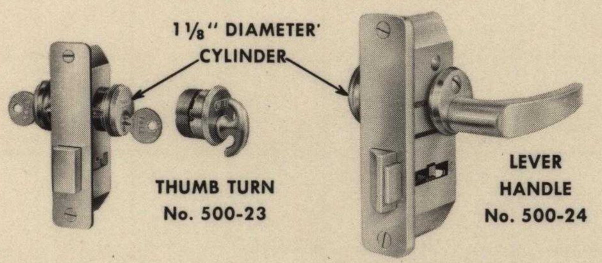
TRANSOM CATCH 500-57
TRANSOM CHAIN 500-58



OVERHEAD DOOR CLOSER WITH SOFFIT BRACKET

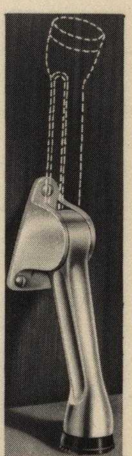


FLUSH BOLT No. 500-59



THUMB TURN No. 500-23

LEVER HANDLE No. 500-24

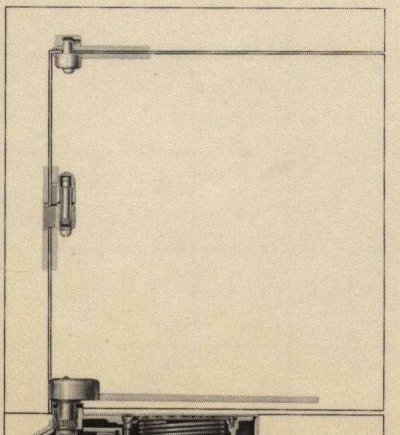


DOOR HOLDER No. 500-61

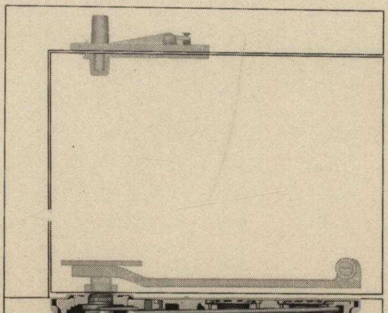
DEAD BOLT LOCK 500-21 LATCH TYPE LOCK 500-22

Thumb Turn may be substituted for Cylinder on either lock. Lever Handle is used only with Latch Type Lock.

NOTE — In ordering locks specify Round or Beveled Face and also the swing of door.



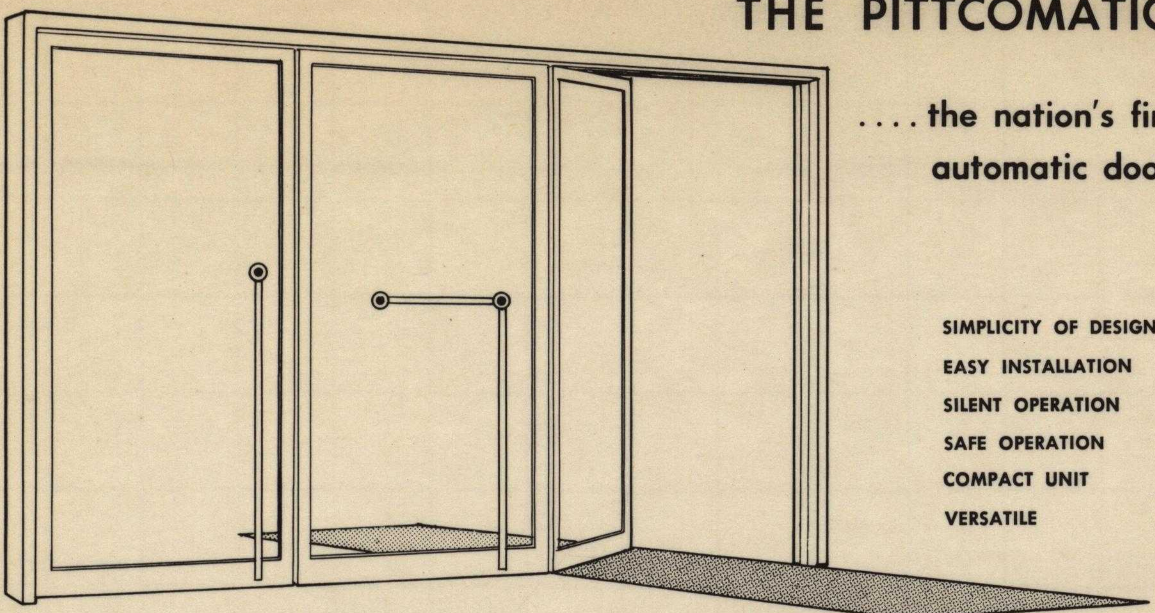
SINGLE ACTING (OFF-SET) FLOOR CHECK



SINGLE- OR DOUBLE-ACTING (CENTER-HUNG) FLOOR CHECK

THE PITTCOMATIC HINGE

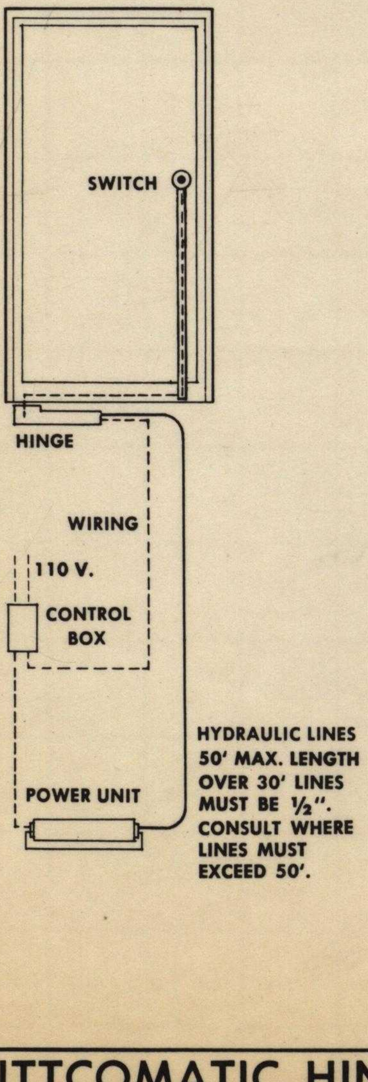
. . . . the nation's finest automatic door operator



SIMPLICITY OF DESIGN
EASY INSTALLATION
SILENT OPERATION
SAFE OPERATION
COMPACT UNIT
VERSATILE

VERTICAL HANDLE ACTIVATION	COMBINATION VERTICAL-HORIZONTAL HANDLE ACTIVATION	MAT ACTIVATION
FOR DOUBLE OR SINGLE ACTING DOORS		SINGLE ACTING DOORS ONLY

TYPICAL PITTCOMATIC INSTALLATIONS

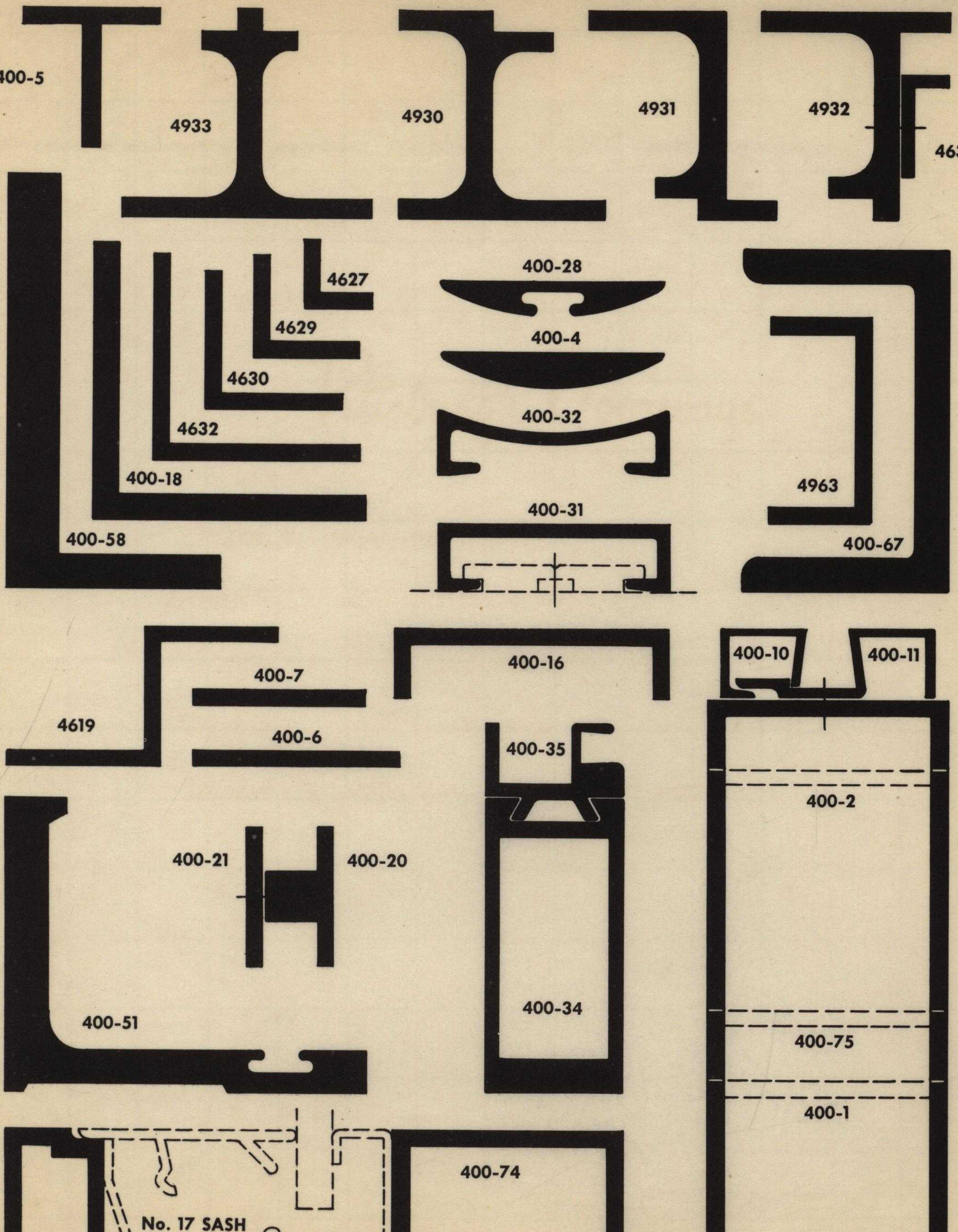

SWITCH
HINGE
WIRING
110 V.
CONTROL BOX
POWER UNIT
HYDRAULIC LINES 50' MAX. LENGTH OVER 30' LINES MUST BE ½". CONSULT WHERE LINES MUST EXCEED 50'.

The Pittcomatic hinge is an automatic door opener with electrical activation and hydraulic operation. The closing cycle features the same type of checking and speed controls as used in the Pittco Hinge. The opening or closing of the door can easily be stopped at any point in its arc providing a safety feature. When the power is off the door can still be operated manually.

Single or double acting operation with handle activation by a 10 volt switch allows the door to be used freely in all style entrances including those at the sidewalk line. Mat operators with single acting operation may be used when more remote activation is desirable.

DIMENSIONS

- POWER UNIT—allow space 9" W x 36" L x 9"H
- CONTROL BOX—6"W x 10"H x 4"D
- HINGE CASE—6¼"W x 18" x 4½"D
- ELECTRIC CONDUIT—½" (BY OTHERS)
- HYDRAULIC LINES—two ⅜" Copper or S. S. tubing
- MOTOR—⅓ H.P. 110 V. 1725 R.P.M.



MOULDINGS

FULL SIZE SECTIONS

Pittsburgh Doorways

SECTION C-1 HERCULITE DOORS

SECTION C-2 HERCULITE DOOR FRAMES

SECTION C-3 PITTCO CHECKING FLOOR HINGE

SECTION C-4 PITTCOMATIC HINGE

SECTION C-5 ACCESSORIES FOR HERCULITE DOORS

PITTSBURGH
DOORWAYS

PITTSBURGH DOORWAYS SPECIFICATIONS

General Conditions

The "General Conditions" of the contract are a part of these specifications.

Herculite Doors and Sidelights

This contractor shall furnish and install ¾" thickness tempered polished plate glass Herculite Doors and Sidelights as made by the Pittsburgh Plate Glass Company. Doors to be of the type and size shown on drawings or specified hereinafter. Integral hardware to be of aluminum, bronze, or stainless steel as specified according to metal and finish. Sidelights to be to the size as shown or specified and to be furnished with hardware to match the doors or as shown on the drawings.

Each door is to be equipped with a lock and/or bolt as supplied by the manufacturer, or as noted on the drawings.

Each door is to be manufactured to accommodate builder's hardware items, such as push-pull bars, checking floor hinges, alarm systems and other accessory items as specified.

The installation of the doors and sidelights to be in accordance with the manufacturer's recommendations, and to the satisfaction of the architect.

Herculite Door Frames

This contractor shall furnish and install Herculite Door Frames, a product of the Pittsburgh Plate Glass Company, as shown on the drawings or specified hereinafter. Frames to be standard style number , to height shown on the drawings, made of aluminum, bronze, or stainless steel as specified. Custom frames where shown on the drawings shall be constructed similarly to the standard frames. Thresholds are to be supplied where shown on the drawings or specified hereinafter. The Door Frames shall be fabricated and assembled at the factory, ready for erection as a single unit at the building. Custom frames that are too large for shipment as a single unit shall be constructed at the factory as assembled frames and then shipped in units so that they can be assembled at the job site.

Aluminum frames shall be fabricated from hollow extruded sections of 63ST-5 alloy with a wall thickness of not less than 5/32". Brake metal or tubing will not be acceptable. They shall be reinforced with 3" steel channels (6"—10.5# in free-standing frames), steel plates, and ½" tie rods wherever required to assure rigidity of the frame. Internal reinforcing steel to be welded at corners and secured with machine screws to aluminum sections. Frames to have 6" extensions to the 3" steel channels at the top of the jambs to fasten to structural steel of the rough opening, or to be provided with concealed anchor bolt holes in the jambs and header. All exposed aluminum faces to be smoothly polished and anodized. Herculite Door Frames of bronze or stainless steel to have sectional contours, dimensions, and construction similar to and the equivalent of aluminum frames. Bronze metal to be 85-15 alloy and to have a satin brushed finish. Stainless steel to be 18-8 alloy with a No.4 brushed finish.

Pittco checking floor hinges and top pivots shall be furnished and shall be properly located and securely fastened to the framing. The hinge boxes are to be welded to the 4" steel (6" on free standing frames) channels connecting the jambs at the base. All necessary mouldings and tracks shall be provided and installed for setting ¾" tempered glass sidelights. All mouldings for installing ¼" transom glass shall be provided and installed.

Frames requiring tempered glass doors with locks, bolts, Pittcomatic hinges, panic devices, or other special builder's hardware items, as noted on the drawings or specified hereinafter shall be fabricated to receive this equipment.

All exposed faces of the framing shall be provided with a suitable protective covering to protect the finish until the installation is completed.

The installation of the Herculite Door Frames is to be in accordance with the manufacturer's recommendations and to the satisfaction of the architect.

PITTSBURGH DOORWAYS SPECIFICATIONS

Pittco Hinges

This contractor shall furnish and install Pittco checking floor hinges, a product of the Pittsburgh Plate Glass Company.

The hinge shall be complete with welded steel cement case, top pivot assembly, and check arm with plate for attachment to the door. The hinge dimensions shall be 6¼"x 6¼"x 4¼". Speed and checking valve controls shall be on the top of the hinge for easy access. Four precision leveling screws shall be provided as an integral part of the hinge.

The hinge shall be provided with (or without) built-in hold-open devices. Hinges shall be suitable for use with single or double acting doors as shown on the drawings.

The installation of the hinges shall be in accordance with the manufacturer's recommendations and to the satisfaction of the architect.

NOTE:

Pittco hinges are acceptable for Federal Buildings under Specification FF-H-121A.

Pittcomatic Hinges

This contractor shall furnish all material, labor and service to properly install Pittcomatic Hinges, a product of the Pittsburgh Plate Glass Company, as shown on the drawings or specified hereinafter.

This contractor shall verify all dimensions at the building, prepare shop drawings, and furnish three sets of prints to the architect for approval.

Other contractors shall furnish and install platforms or racks to accommodate the power unit and control box. Also, other contractors shall provide 110V-A.C. electric power with an electric fused safety switch, and ½" thin wall electric conduit from the Pittcomatic hinge case to the control box and thence to the power unit.

Each set of Pittcomatic equipment for a door shall consist of a hydraulic operated checking floor hinge, a power unit with hydraulic pump and a ⅓ H.P., 110V motor, an electronic control box, hydraulic lines of ⅜" or ½" of copper (or stainless steel) to connect the hinge and power unit located as shown on drawing, and handle or mat activating controls as shown on the drawings, or specified hereinafter. Hinges shall be for single or double acting doors as shown on the drawings. Where handles are used, they shall be vertical or vertical and horizontal style, and provided with push-pull lettering as shown on the drawings or specified hereinafter.

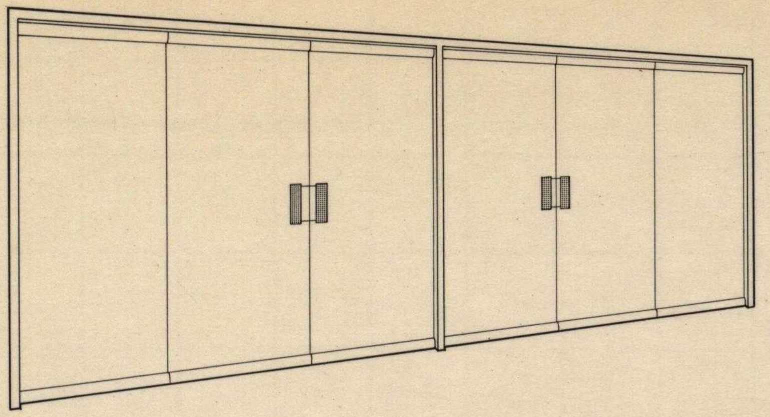
The installation of the Pittcomatic hinges shall be in accordance with the manufacturer's recommendations, and to the satisfaction of the architect.

Accessories For Herculite Doors

This contractor shall furnish and install accessories for Herculite Doors as shown on the drawings or specified hereinafter. Under this classification are items such as: Indiana style stock push-pull handles of the designated style number, with metal and finish as specified; Glynn-Johnson door holders for single or double acting doors as shown on the drawings; thresholds and door stops of aluminum or bronze when Herculite door frames are not used; custom designed push-pull plates or handles as shown on the drawings; and Adjusto-Seal or Weather-Seal weather-stripping for Herculite Doors.

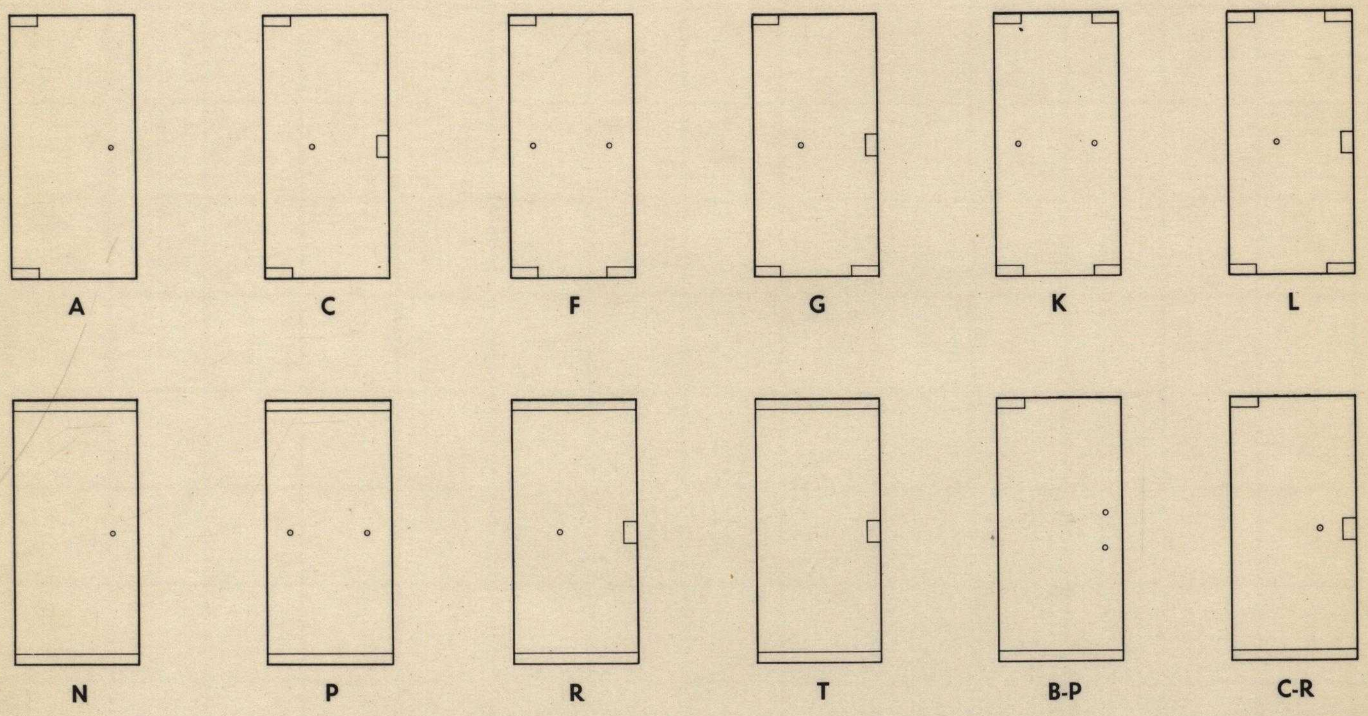
Russwin Fire Exit Bolts or electric strikes, where shown on the drawings or specified hereinafter, are to be included in this contract.

Accessory items shall be installed according to the manufacturer's recommendations, and to the satisfaction of the architect.



VISABILITY
STRENGTH
DURABILITY
SECURITY
SAFETY
EASY OPERATION
LOW MAINTENANCE
VARIABLE DESIGNS

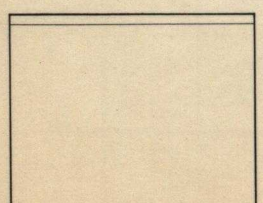
. . . . INCOMPARABLE ARCHITECTURAL BEAUTY



STANDARD TYPES OF ¾″ THICKNESS HERCULITE TEMPERED GLASS DOORS

WIDTHS UP TO 48″ HEIGHTS UP TO 108″ TOLERANCE PLUS NOTHING, MINUS 1/16″

HARDWARE OF ALUMINUM * BRONZE * STAINLESS STEEL



HERCULITE SIDELIGHTS

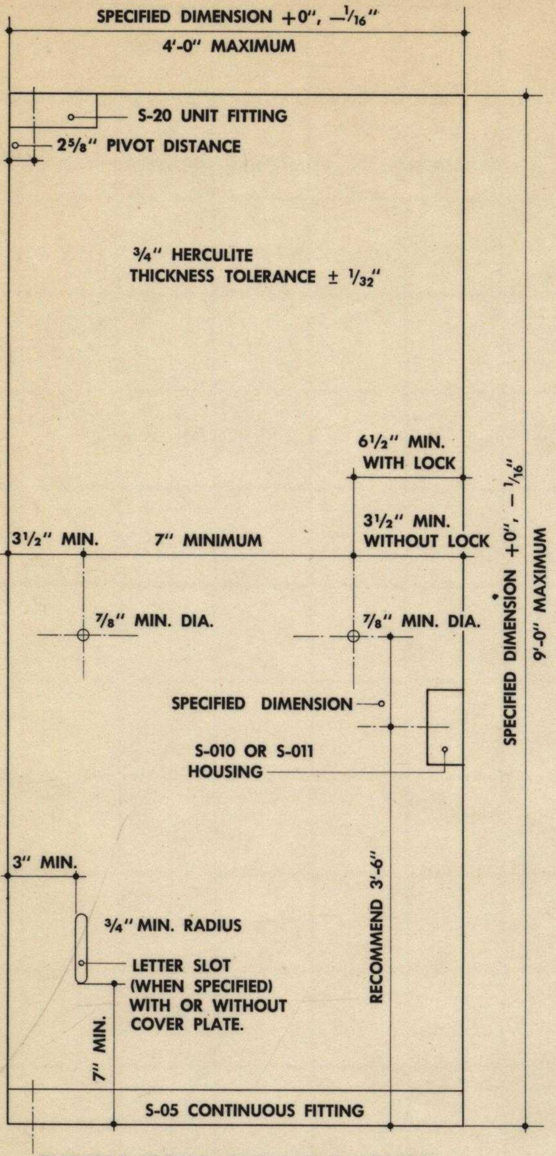
¾″ THICKNESS TEMPERED POLISHED PLATE GLASS

AVAILABLE WITH OR WITHOUT HARDWARE TO MATCH HERCULITE DOORS.

MAXIMUM GLASS SIZE 72″x108″
DIMENSIONAL TOLERANCE PLUS NOTHING, MINUS 1/16″

*SECTIONS SIMILAR TO ALUMINUM

NO SCALE



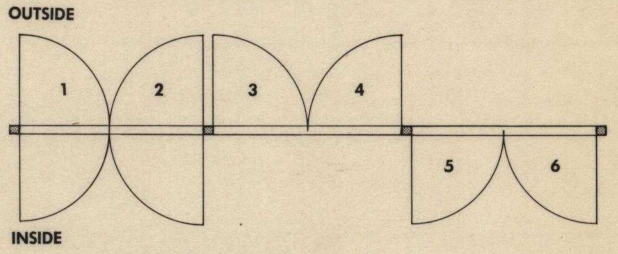
TYPICAL DOOR SHOWING DESIGN LIMITATIONS AND HARDWARE

- DOOR SIZE • UP TO 4'-0"x 9'-0"
- TOLERANCE • DIMENSION PLUS 0", MINUS 1/16"
- EDGEWORK • ALL EXPOSED EDGES POLISHED, 2" RADIUS ON LONG EDGES, OTHERS 1/16" BEVEL.
- CLEARANCE • 1/8" RECOMMENDED AT TOP AND SIDES, 3/16" AT BOTTOM.
- PIVOT DISTANCE • 2 5/8" STANDARD BUT ADJUSTABLE FROM 2 5/8" TO 1 1/8".

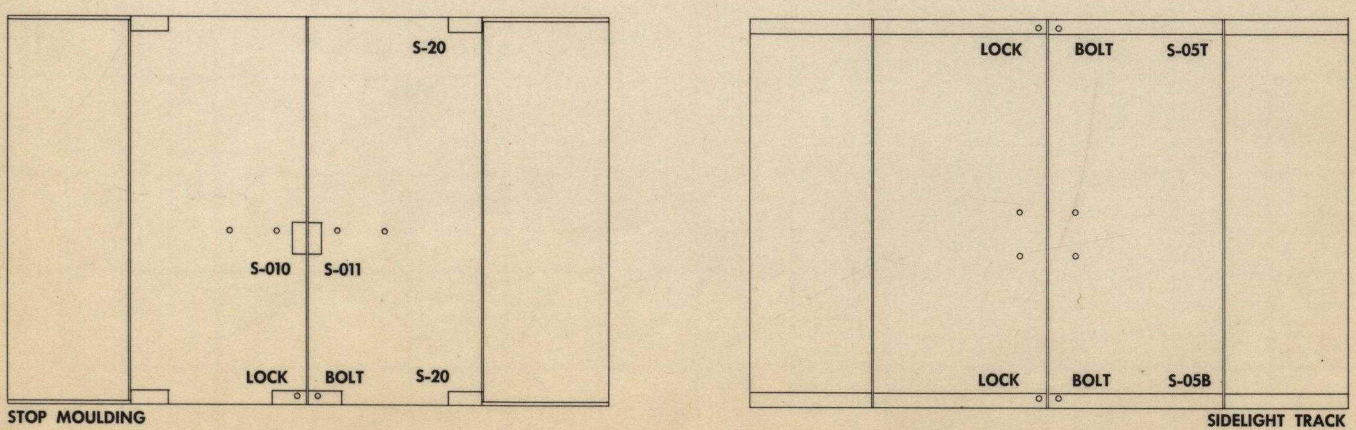
HERCULITE TEMPERED GLASS HAS APPROXIMATELY FOUR TO FIVE TIMES THE STRENGTH OF NORMAL PLATE GLASS OF THE SAME THICKNESS. HOWEVER, IT IS BREAKABLE BUT WHEN BROKEN IT CRACKS INTO SMALL CUBIC FRAGMENTS RESEMBLING ROCK CANDY. THE PHYSICAL CHARACTERISTICS OF HERCULITE ARE SUCH THAT ALL FABRICATION MUST BE COMPLETED BEFORE THE GLASS IS TEMPERED.

HARDWARE •

THE ALUMINUM, BRONZE, OR STAINLESS STEEL DOOR HARDWARE WITH WHICH HERCULITE PLATE IS EQUIPPED IS CEMENTED TO THE TEMPERED GLASS AT THE FACTORY AND CANNOT BE CHANGED OR ALTERED ON THE JOB WITHOUT DAMAGE TO THE GLASS. HERCULITE CANNOT BE DRILLED, CUT, OR ALTERED AFTER LEAVING THE FACTORY.



DOOR SWING DIAGRAM

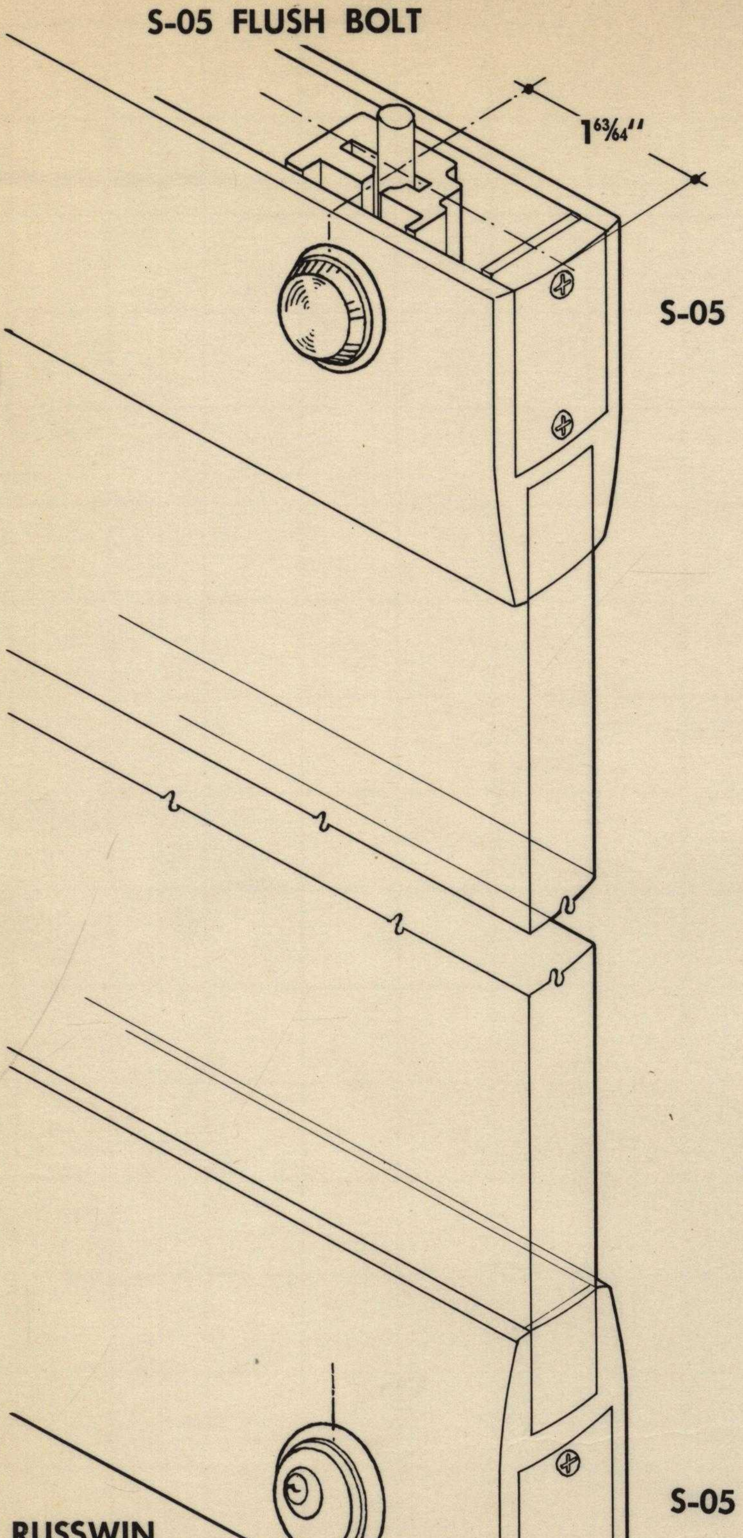


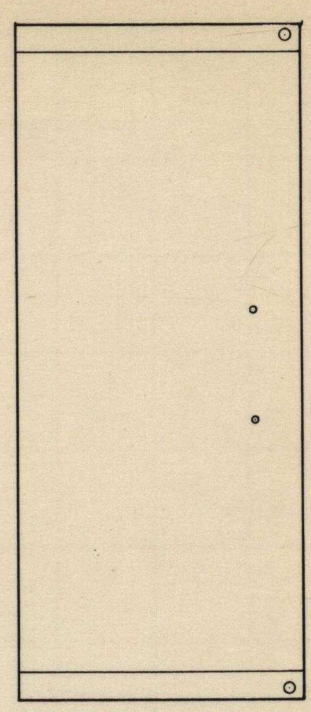
WITH UNIT FITTINGS

WITH CONTINUOUS FITTINGS

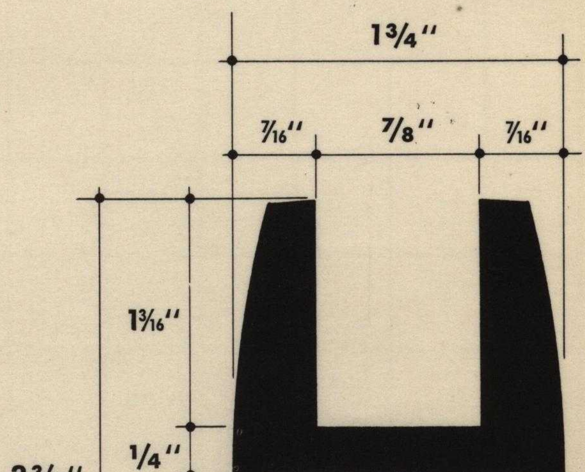
TYPICAL INTERIOR ELEVATIONS

NO SCALE



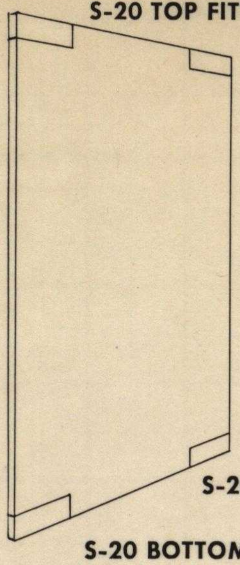


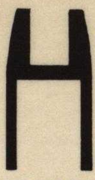
TYPICAL TYPE P DOOR



TYPICAL SECTION THRU ALUMINUM FITTINGS S-05 AND S-20

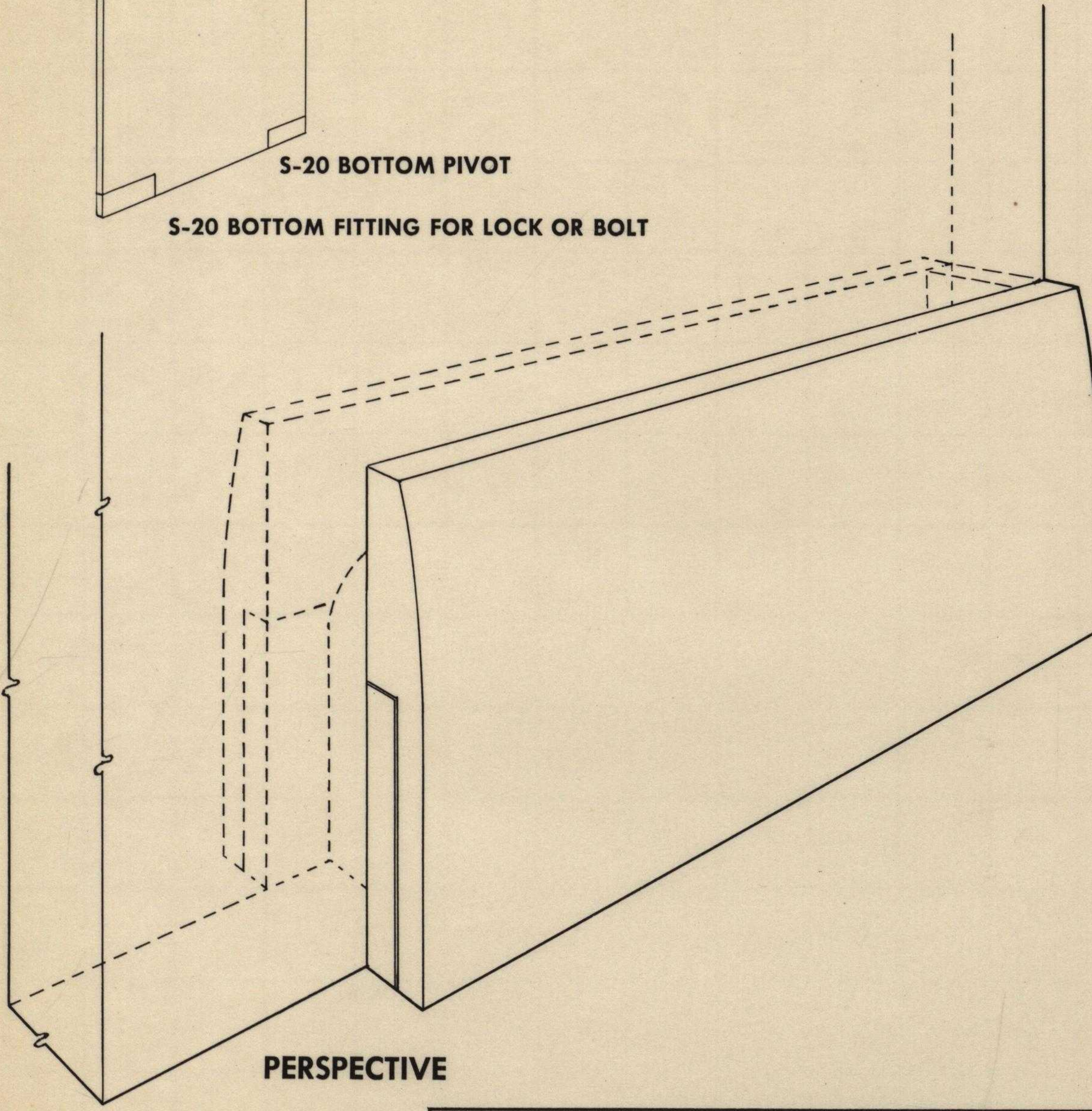
SECTION FULL SIZE


S-20 TOP FITTING FOR LOCK OR BOLT
S-20 TOP PIVOT
S-20 BOTTOM PIVOT
S-20 BOTTOM FITTING FOR LOCK OR BOLT

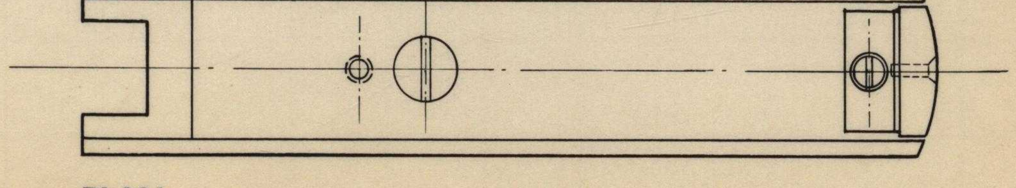


SECTION

The maximum in all glass door design can be achieved with S-20 hardware. These unit fittings are made to accommodate top or bottom pivots, locks or bolts. When used with S-20 top pivot-transom brackets the transom bar can be eliminated.

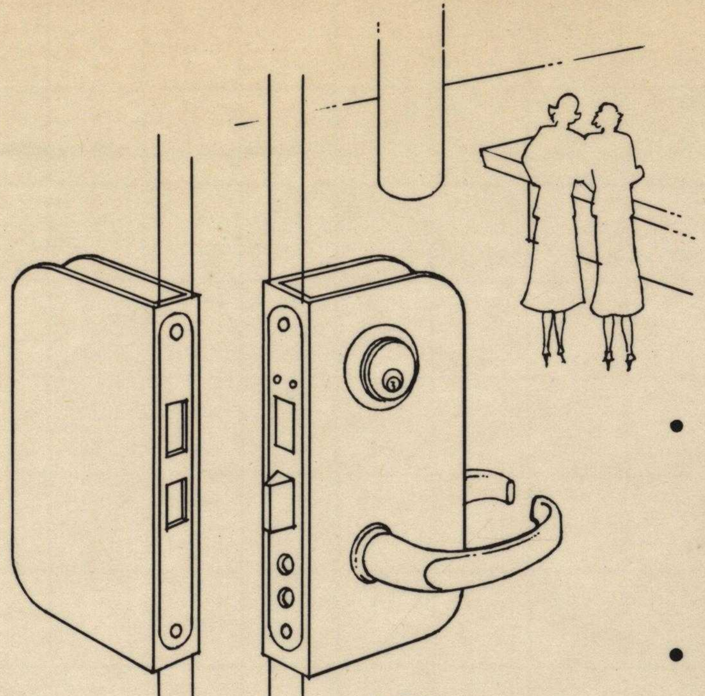


PERSPECTIVE

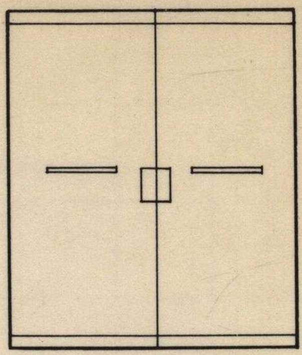


PLAN

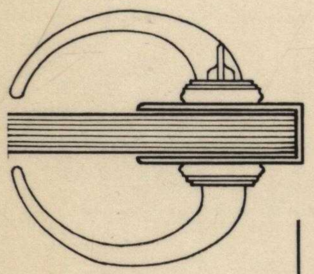
SECTION ONE QUARTER SIZE



NOTE:
Knob handle available in lieu of lever handle.

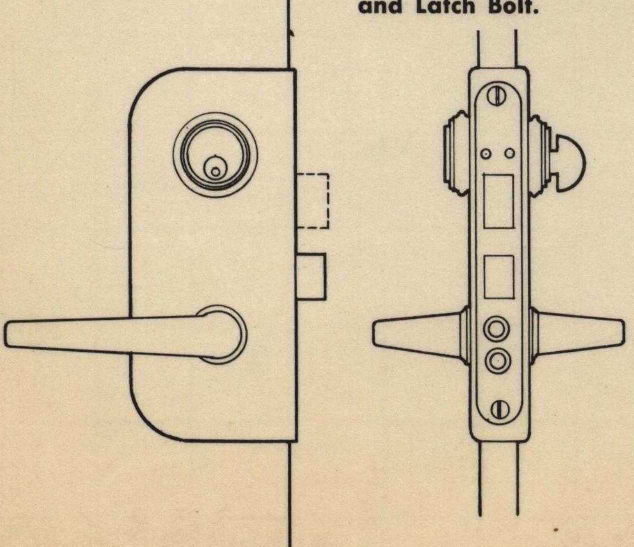


- CENTER TYPE LOCKS ARE RECOMMENDED FOR ENTRANCES WHERE MORE ELABORATE LOCK CONTROLS ARE REQUIRED SUCH AS BANK BUILDINGS, APARTMENTS, ETC.
- THE S-010E (RUSSWIN HS-4250) IS CONTAINED IN A HOUSING WHICH IS AN INTEGRAL PART OF THE DOOR.
- THIS LOCK AS USED IN HERCULITE DOORS MAY BE MASTERKEYED.

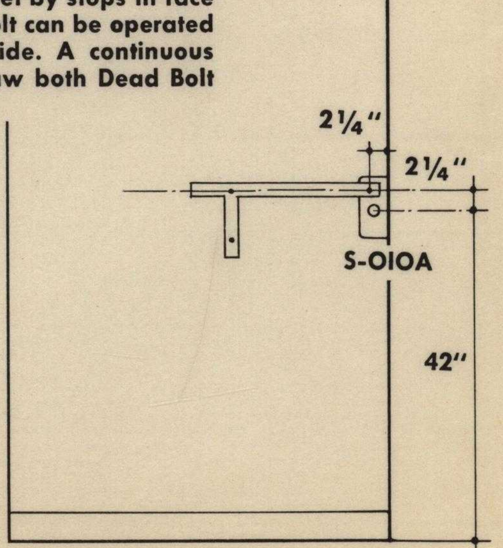


OPERATION

Latch Bolt can be operated by lever handle from either side at all times, except when outside lever is set by stops in face of lock. When outside lever is set, Latch Bolt can be operated by key only from outside and lever inside. A continuous turn of the key or Turn Knob will withdraw both Dead Bolt and Latch Bolt.



S-010 E



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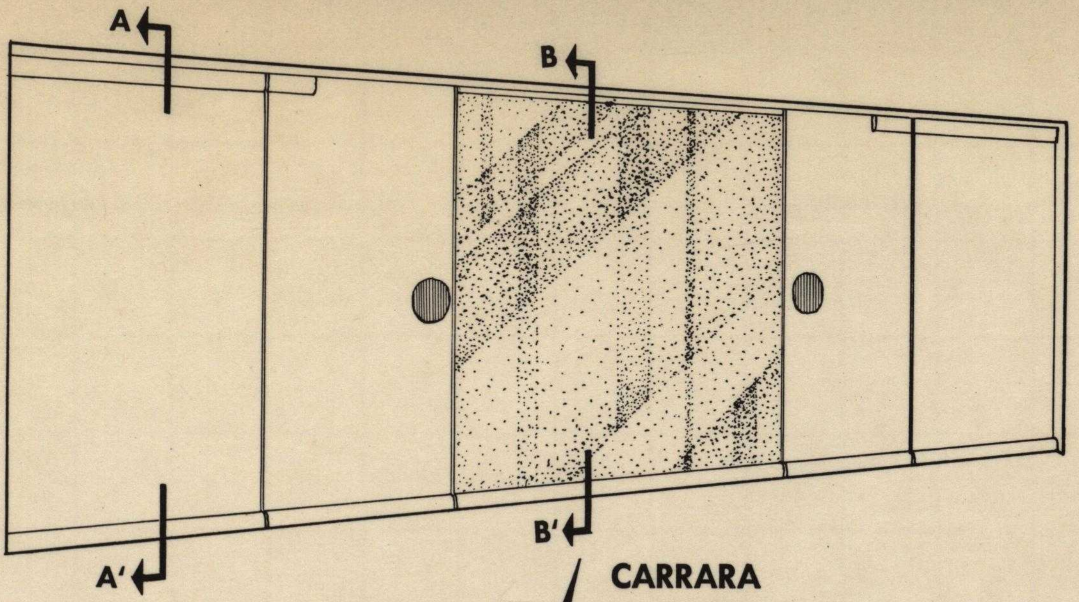
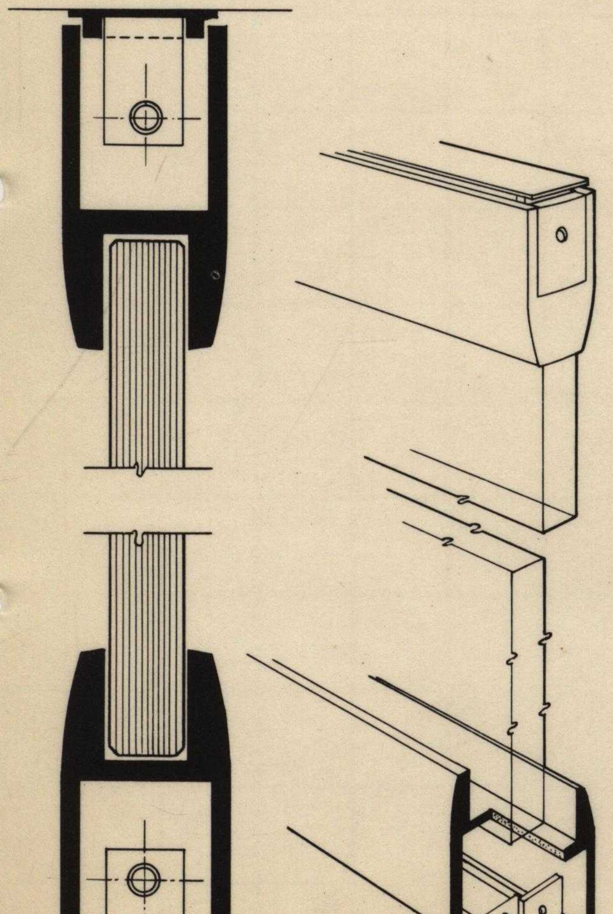
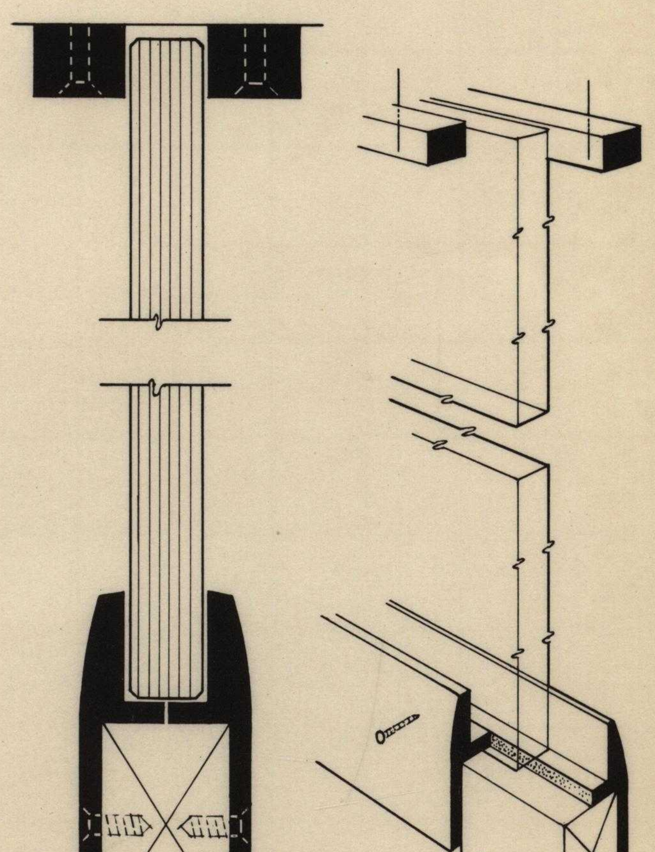


TEMPERED
CARRARA
POLISHED PLATE
ROUGH TEXTURE GLASS

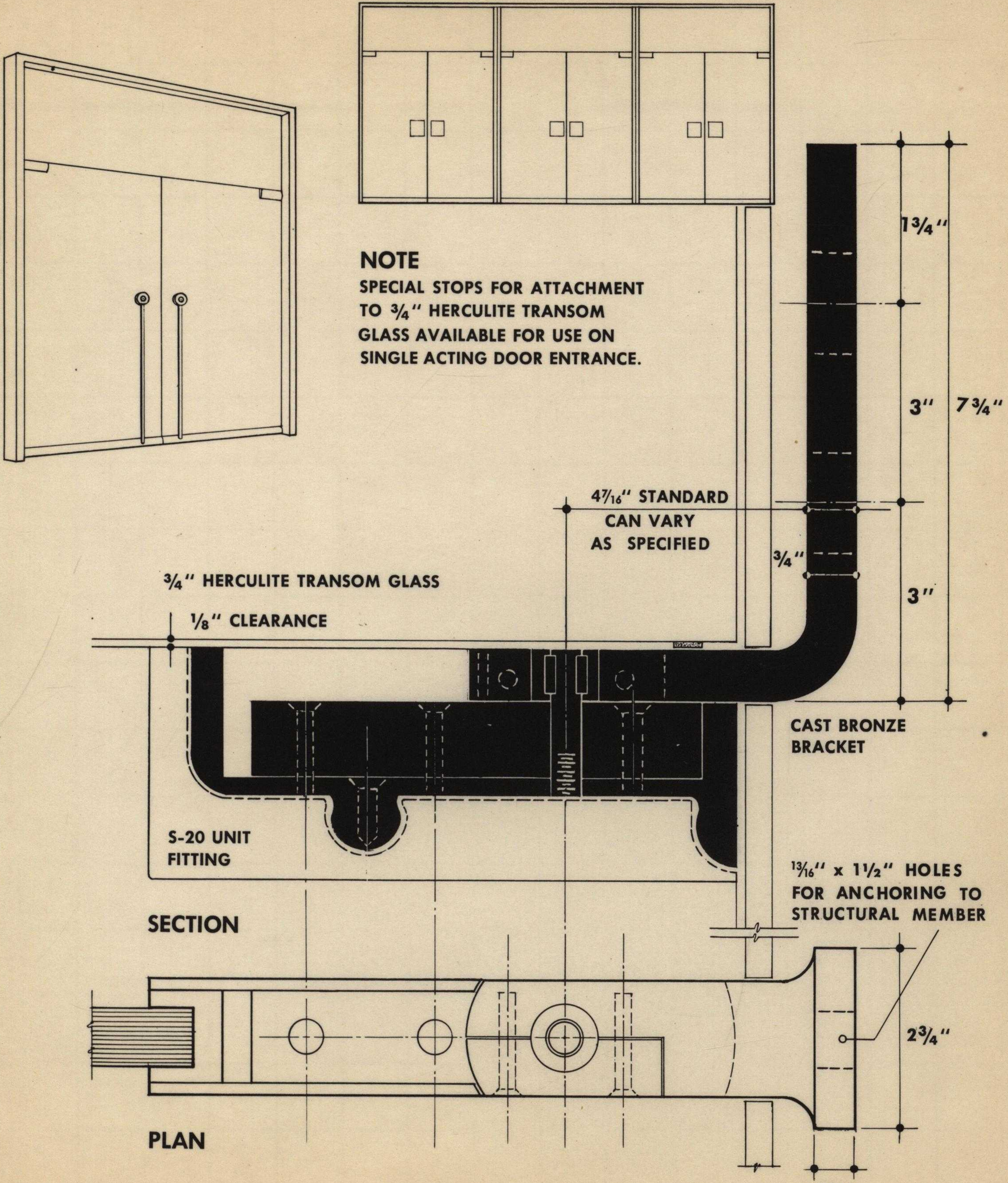


TRACK SETTING
SECTION A-A'



STOP SETTING
SECTION B-B'

HALF FULL SIZE

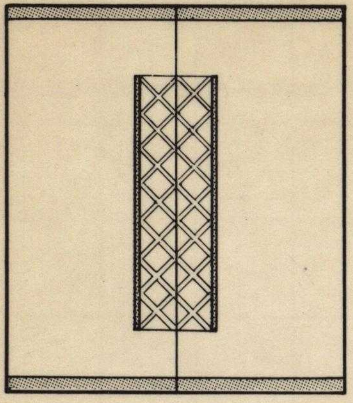


NOTE

SPECIAL STOPS FOR ATTACHMENT TO ¾" HERCULITE TRANSOM GLASS AVAILABLE FOR USE ON SINGLE ACTING DOOR ENTRANCE.

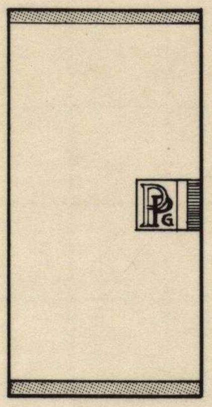
HALF FULL SIZE

DECORATION



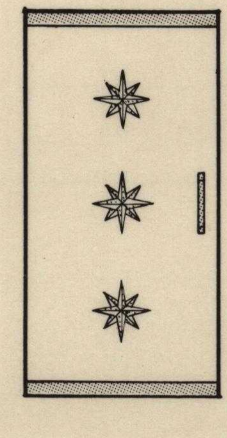
. . SANDBLAST

Decorative effects similar to those illustrated are possible only with an all glass door.



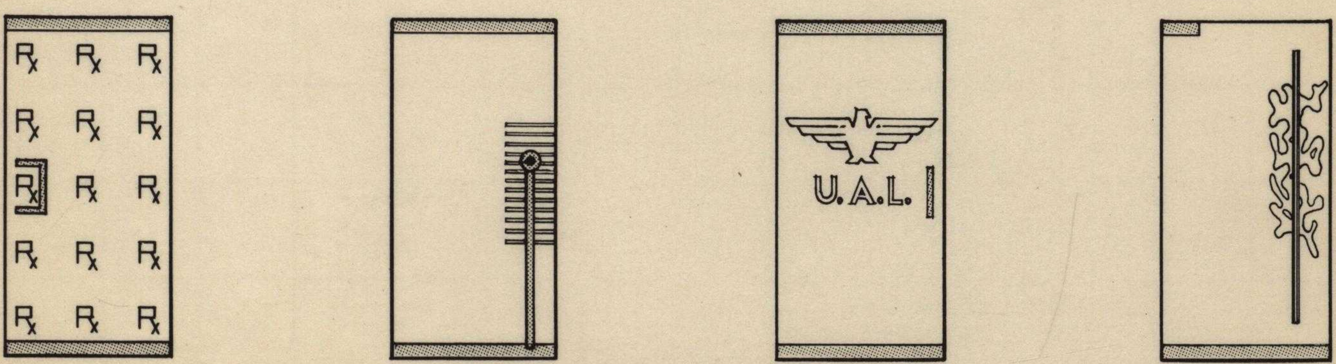
. . APPLIED MATERIALS

The door can become the focal point of the store. It can be the decorative touch that architects and designers use to lighten or give sparkle to a plain front or design.



. . FUSED COLORS

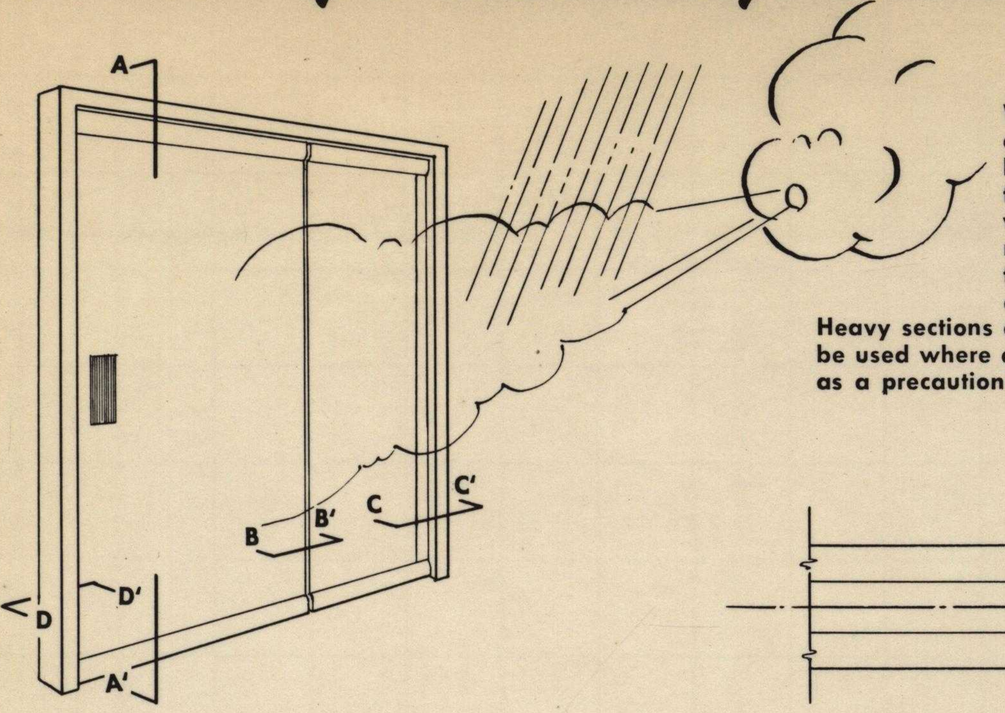
Now for the first time one can have decoration in true ceramic colors, (fired-on, permanent colors) as well as sandblasted decoration.



TYPICAL DESIGN TREATMENTS

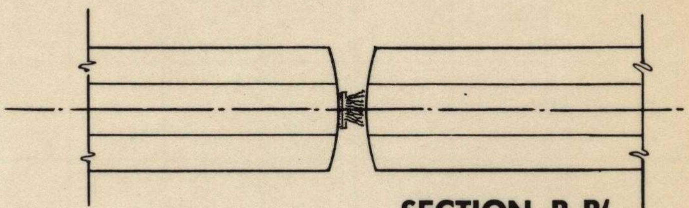
- **Color may be on both sides of door, for example, the background could be on one side with the design on the other, but don't overlook the fact that the door is ¾" thick, so when viewed from an angle certain designs may appear to be off register.**
- **Don't expect ceramic colors to exactly match water color or paint samples.**
- **Sandblasted designs may be done in various tones or with certain parts of the design cut slightly below the surface, somewhat less than 1/32".**
- **Keep shapes as simple as possible.**
- **Avoid superimposing one color on another.**
- **If possible avoid close register of colors.**

NO SCALE

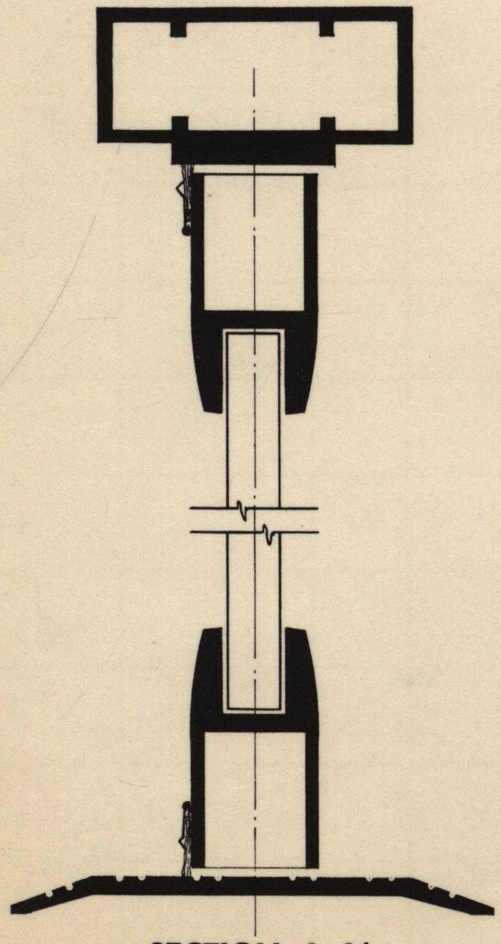


Weatherstripping is available for all edges of Herculite Doors. When specified, frames will be supplied with weatherstripping in the jamb members. The brush-type fabric flexes easily with the operation of the doors.

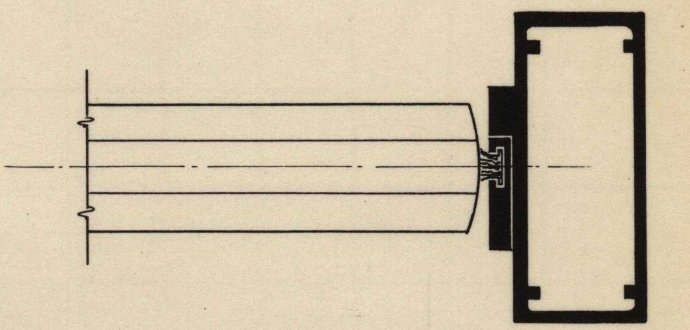
Heavy sections about a ½'' clearance may be used where a flexible edging is required as a precaution against injury to fingers.



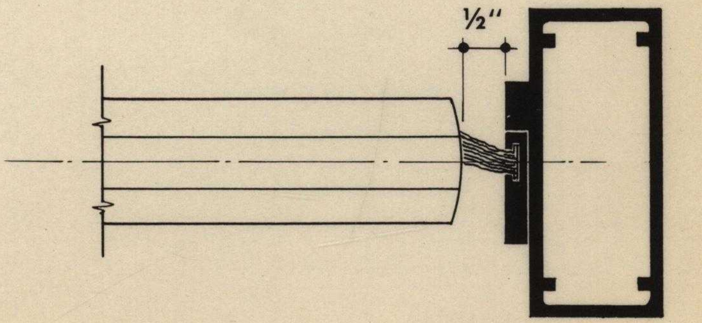
SECTION B-B'



SECTION A-A'



SECTION C-C'

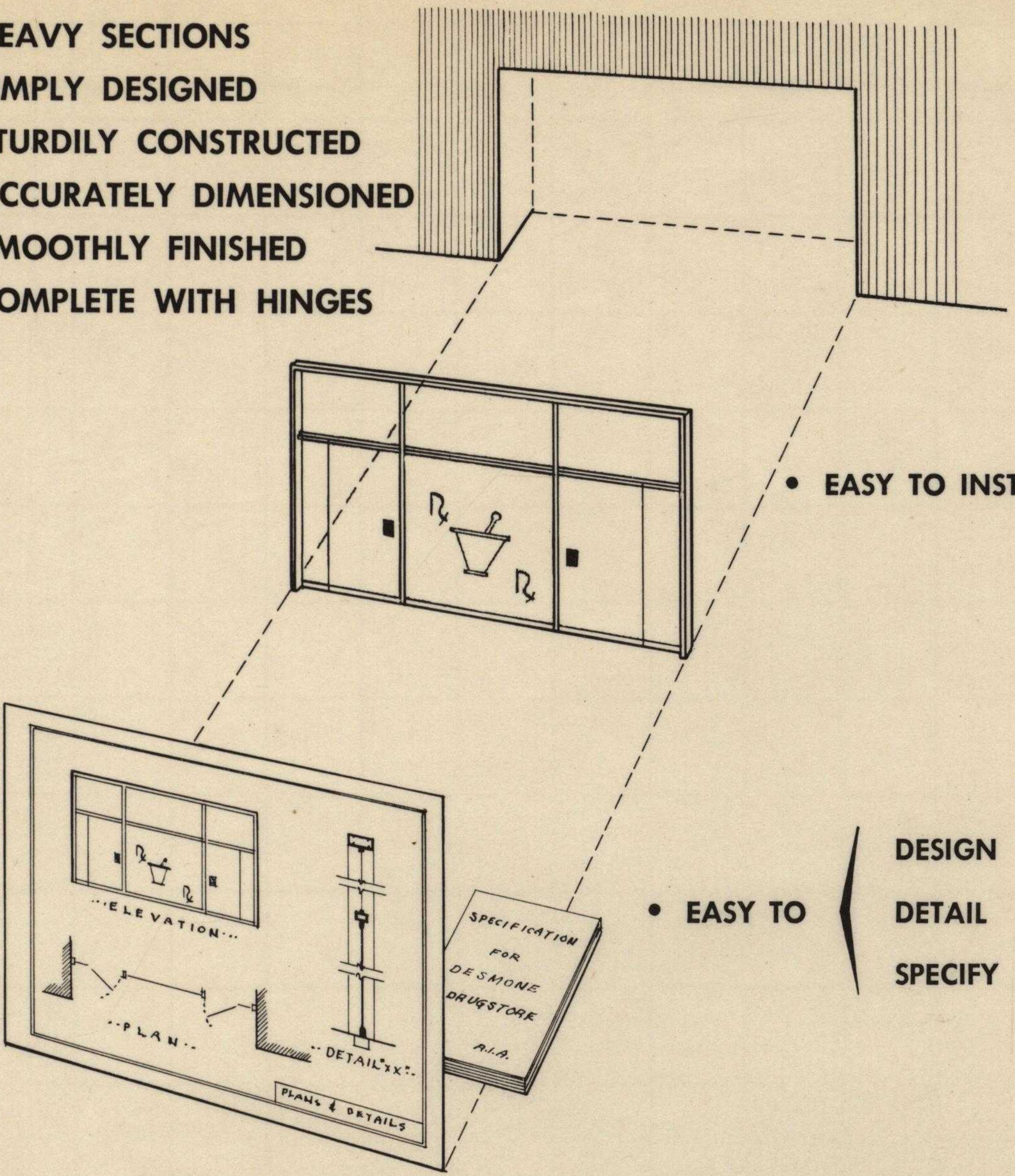


SECTION D-D'

NO SCALE

FACTORY-BUILT FRAMES

- HEAVY SECTIONS
- SIMPLY DESIGNED
- STURDILY CONSTRUCTED
- ACCURATELY DIMENSIONED
- SMOOTHLY FINISHED
- COMPLETE WITH HINGES


ELEVATION
PLAN
DETAIL "XX"
PLANS & DETAILS
SPECIFICATION FOR DESMONE DRUGSTORE A.I.A.

- EASY TO INSTALL

- EASY TO DESIGN
  DETAIL
  SPECIFY

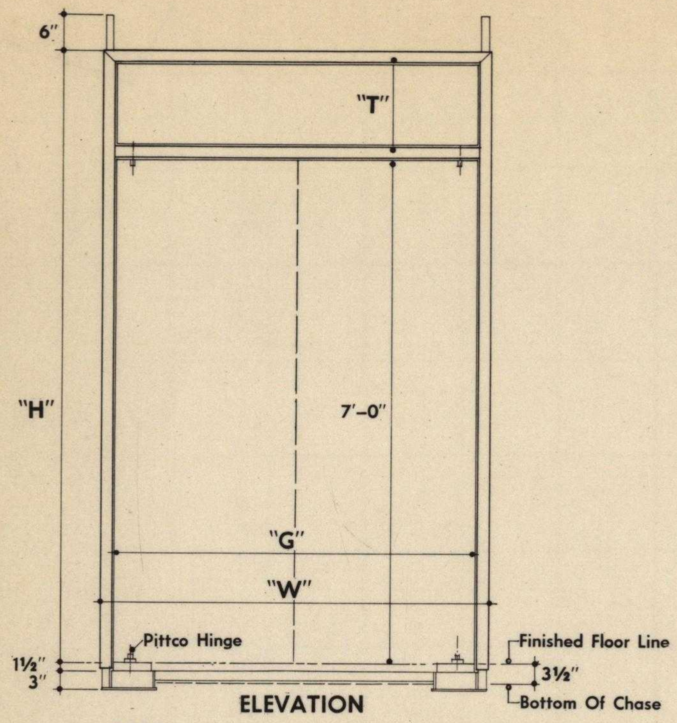
STANDARD FRAMES

Twelve Standard Style Frames to accommodate single doors, a door with two sidelights, or a pair of doors, and with heights to 12'0" are available for prompt shipment; also four Free-Standing Door Frames. Standard frames, used individually or in combinations, can be accommodated to most entrances.

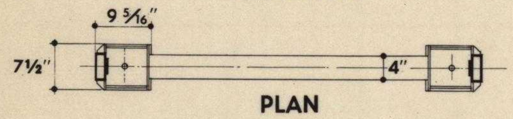
CUSTOM FRAMES

Custom Herculite Door Frames, similar in construction to standard frames, can be fabricated to conform to architects' designs and to required dimensions. Included in the custom group are the frames with S-20 transom brackets in lieu of transom bar, or those with operating transoms. Both standard and custom frames can be constructed to accommodate automatic door controls, anti-panic devices, door holders, and burglary alarm devices. Frames too large for normal shipping will be dismantled for assembly at the job-site.

NO SCALE



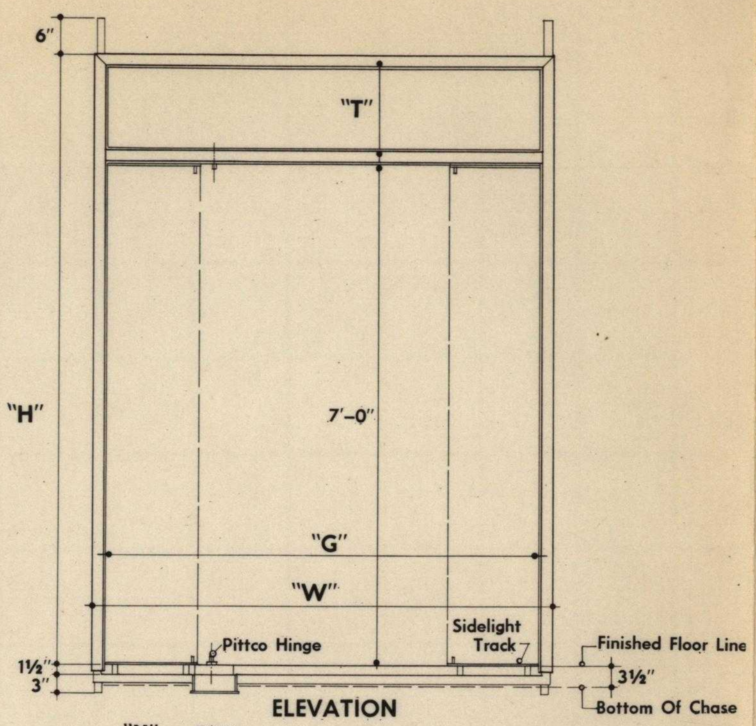
ELEVATION



PLAN

STYLE No. 1 OR 7

DOUBLE DOORS



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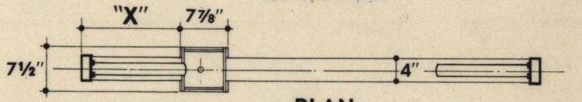
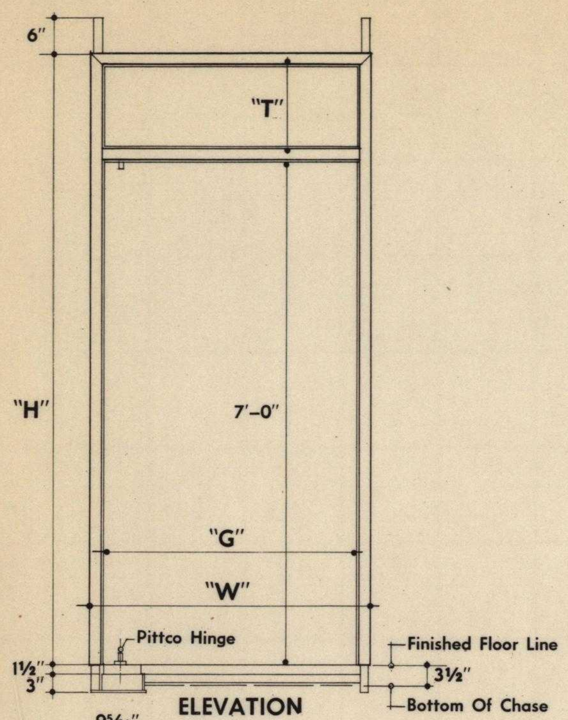


PLAN

STYLE No. 2 OR 8

SINGLE DOOR WITH SIDELIGHTS



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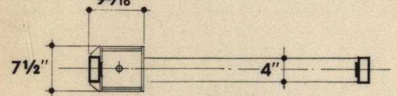
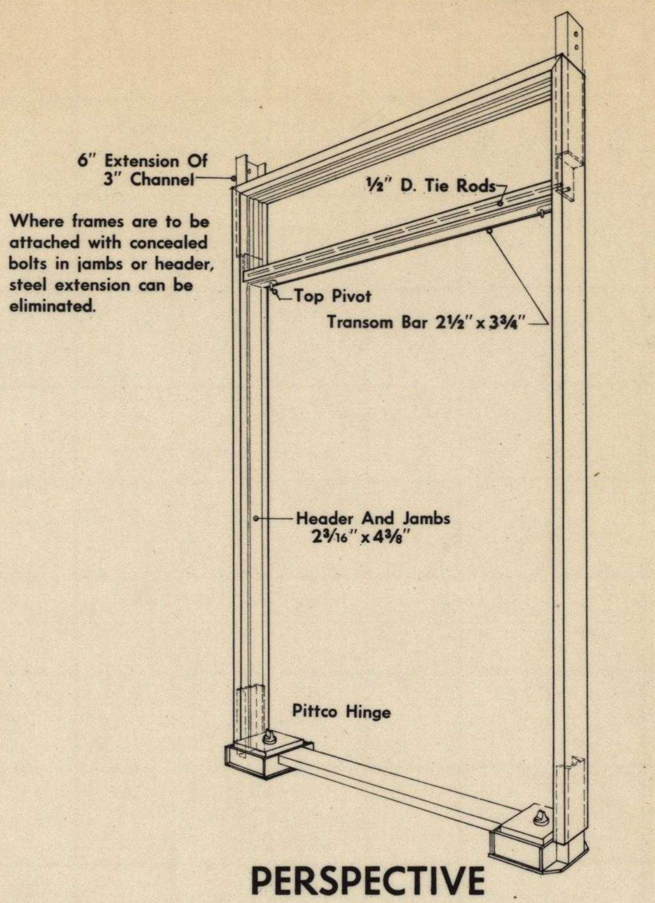


PLAN

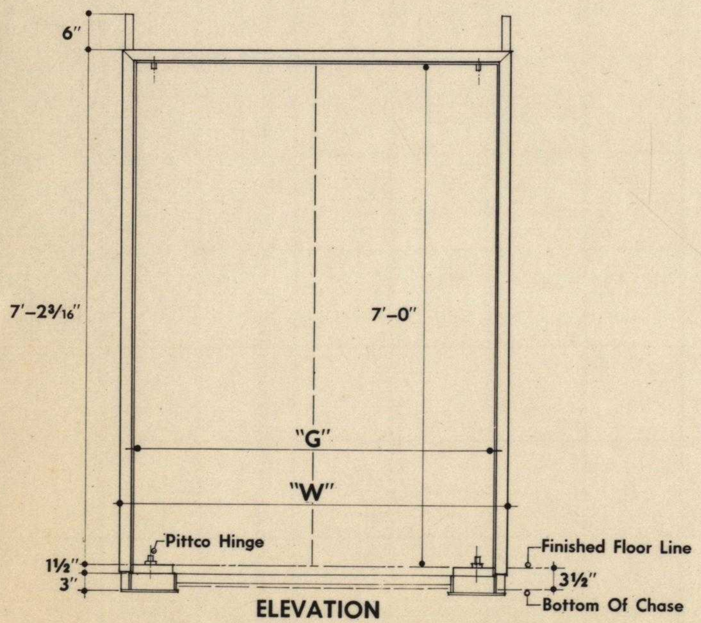
STYLE NO. 3 OR 9

SINGLE DOOR

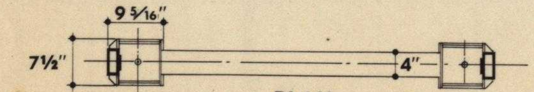


Where frames are to be attached with concealed bolts in jambs or header, steel extension can be eliminated.

PERSPECTIVE



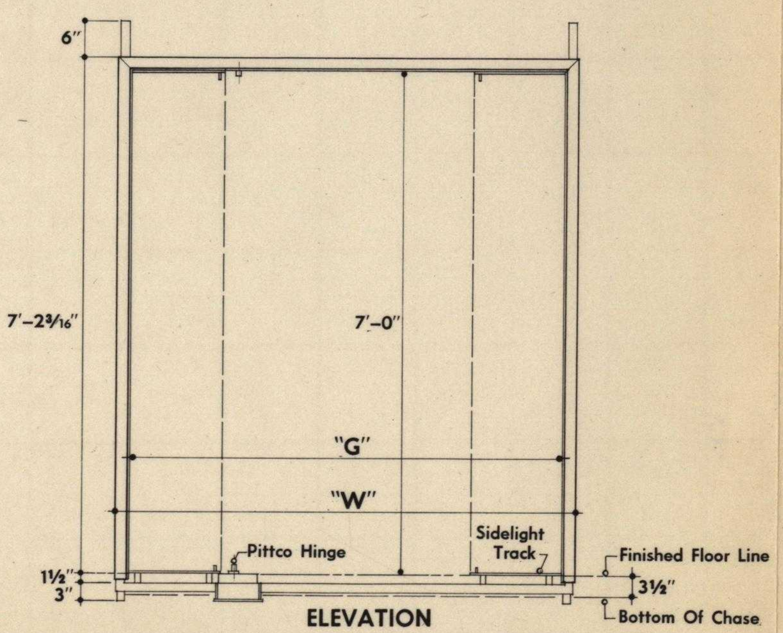
ELEVATION



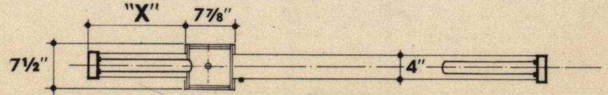
PLAN

STYLE No. 4 OR 10

DOUBLE DOORS



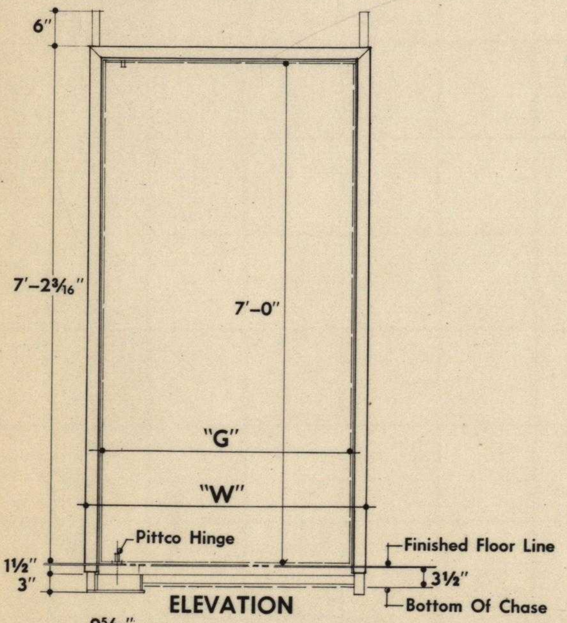
ELEVATION



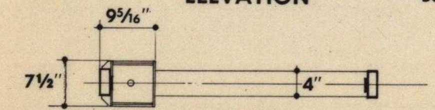
PLAN

STYLE No. 5 OR 11

SINGLE DOOR WITH SIDELIGHTS



ELEVATION



PLAN

STYLE No. 6 OR 12

SINGLE DOOR

STANDARD DIMENSIONS

DOOR FRAME	DIMENSIONS			DOOR		SIDELIGHTS	
Style No.	"W"	"G"	"X"	Quantity	Size	Quantity	"S" (Size)
1	5'- 4⅜"	5'-0"	•	2	29¹³⁄₁₆"x 83¹¹⁄₁₆"	•	
2	5'- 4⅜"	5'-0"	13½"	1	35¹³⁄₁₆"x 83¹¹⁄₁₆"	2	12³⁄₁₆"x 83¹¹⁄₁₆"
3	3'- 4⅜"	3'-0"	•	1	35¹³⁄₁₆"x 83¹¹⁄₁₆"	•	
4	5'- 4⅜"	5'-0"	•	2	29¹³⁄₁₆"x 83¹¹⁄₁₆"	•	
5	5'- 4⅜"	5'-0"	13½"	1	35¹³⁄₁₆"x 83¹¹⁄₁₆"	2	12³⁄₁₆"x 83¹¹⁄₁₆"
6	3'- 4⅜"	3'-0"	•	1	35¹³⁄₁₆"x 83¹¹⁄₁₆"	•	
7	6'- 4⅜"	6'-0"	•	2	35¹³⁄₁₆"x 83¹¹⁄₁₆"	•	
8	6'- 4⅜"	6'-0"	16½"	1	41¹³⁄₁₆"x 83¹¹⁄₁₆"	2	15³⁄₁₆"x 83¹¹⁄₁₆"
9	3'-10⅜"	3'-6"	•	1	41¹³⁄₁₆"x 83¹¹⁄₁₆"	•	
10	6'- 4⅜"	6'-0"	•	2	35¹³⁄₁₆"x 83¹¹⁄₁₆"	•	
11	6'- 4⅜"	6'-0"	16½"	1	41¹³⁄₁₆"x 83¹¹⁄₁₆"	2	15³⁄₁₆"x 83¹¹⁄₁₆"
12	3'-10⅜"	3'-6"	•	1	41¹³⁄₁₆"x 83¹¹⁄₁₆"	•	

VARIABLE DIMENSIONS

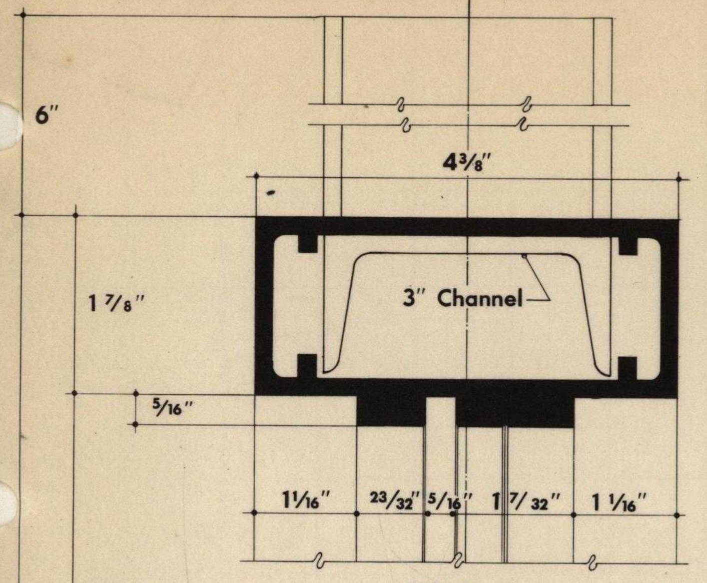
"H"	8'-6"	9'-0"	9'-6"	10'-0"	10'-6"	11'-0"	11'-6"	12'-0"
"T"	13¹⁵⁄₁₆"	19¹⁵⁄₁₆"	25¹⁵⁄₁₆"	31¹⁵⁄₁₆"	37¹⁵⁄₁₆"	43¹⁵⁄₁₆"	49¹⁵⁄₁₆"	55¹⁵⁄₁₆"

Frames can be supplied with thresholds.
Door and sidelight heights will be adjusted to 83³⁄₁₆".

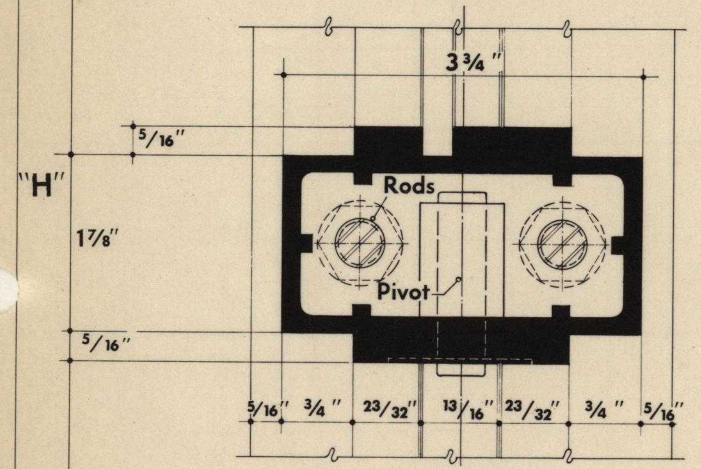
LEGEND

W—Over-all width of frame.
G—Clear opening width between jambs.
X—Outerface of jamb to hinge box.
H—Overall height of opening from finished floor line to top of frame.
T—Clear opening height of transom.

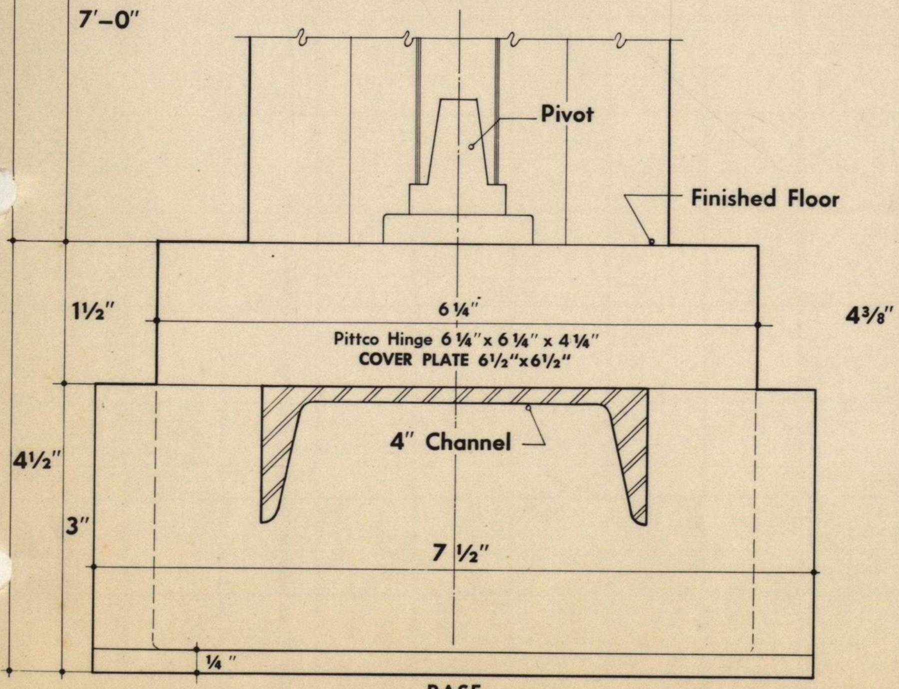
NO SCALE



HEAD

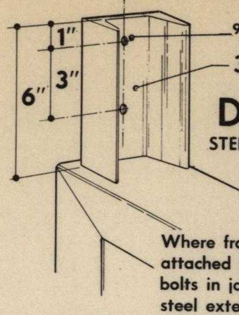


TRANSOM


7'-0"
Pivot
Finished Floor
1 1/2"
6 1/4"
Pittco Hinge 6 1/4" x 6 1/4" x 4 1/4"
COVER PLATE 6 1/2" x 6 1/2"
4 1/2"
4" Channel
3"
7 1/2"
1/4"

BASE

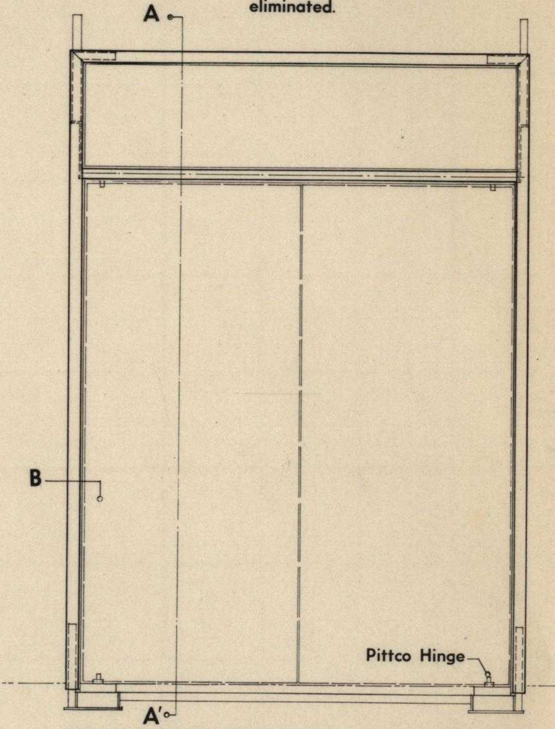
SECTION A-A'



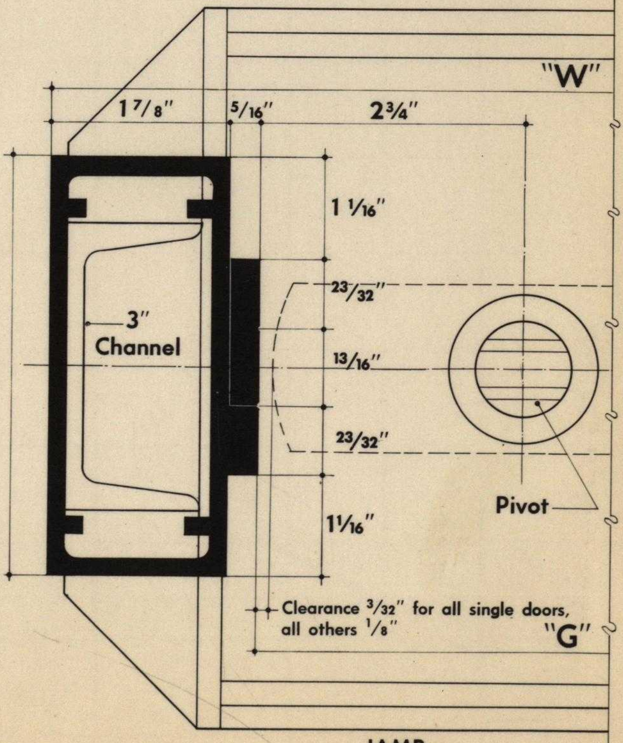
DETAIL "A"

STEEL AT TOP OF FRAME

Where frames are to be attached with concealed bolts in jambs or header, steel extension can be eliminated.

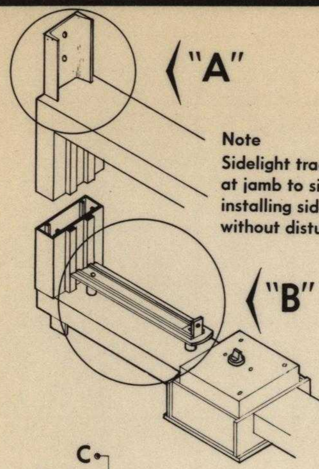


FRAME WITH TRANSOM, NO SIDELIGHTS



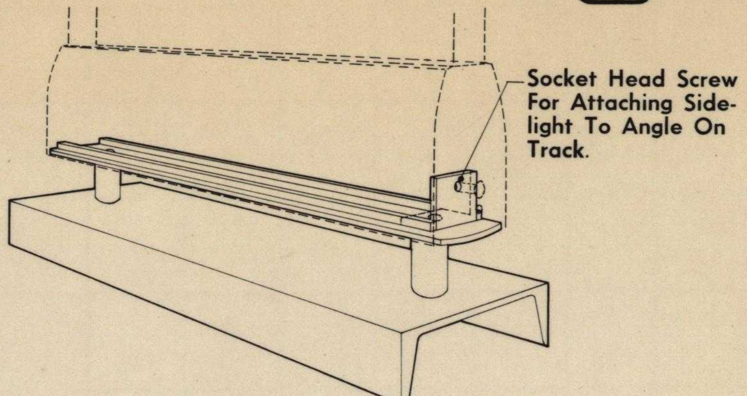
JAMB

SECTION B



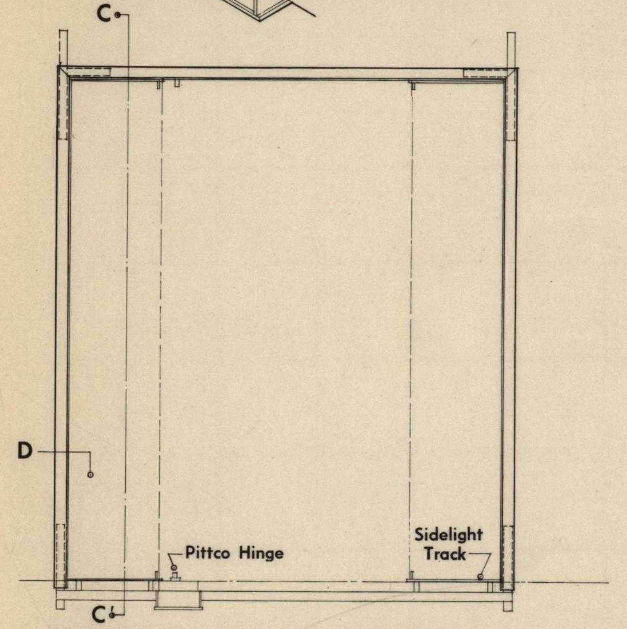
Note
Sidelight tracks are pivoted at jamb to simplify installing sidelight without disturbing hinge

PERSPECTIVE

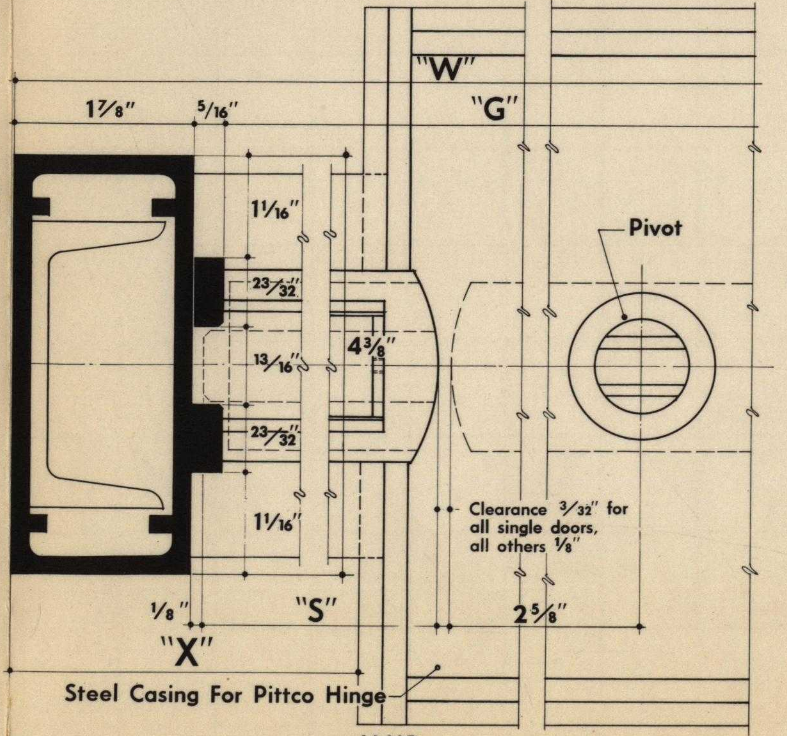

Socket Head Screw For Attaching Sidelight To Angle On Track.

DETAIL "B"

SIDELIGHT TRACK

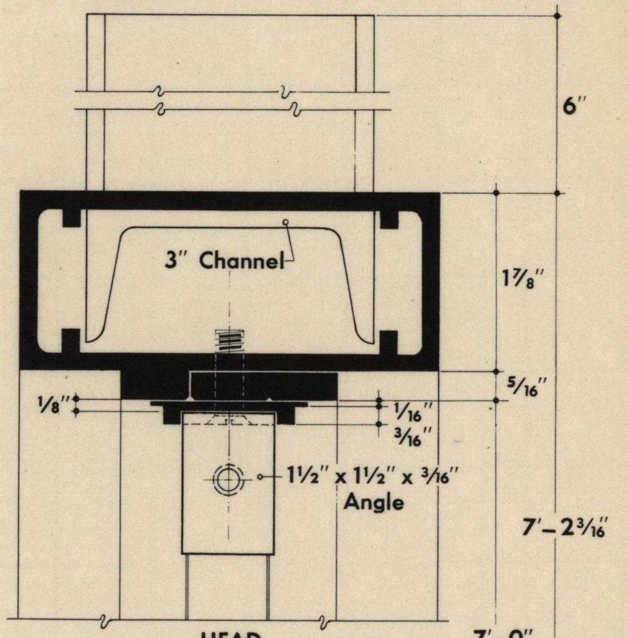


FRAME WITH SIDELIGHTS, NO TRANSOM

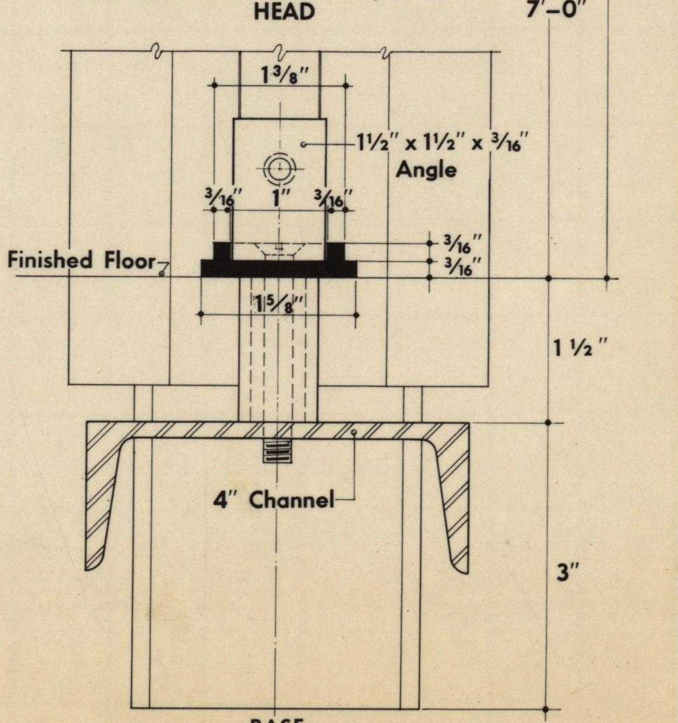

"W"
"G"
1 7/8"
5/16"
1 1/16"
23/32"
13/16"
4 3/8"
23/32"
1 1/16"
Pivot
Clearance 3/32" for all single doors, all others 1/8"
1/8"
"S"
2 5/8"
"X"
Steel Casing For Pittco Hinge

JAMB

SECTION D



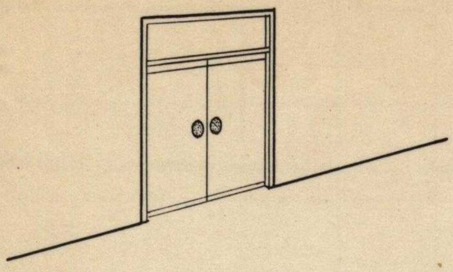
HEAD

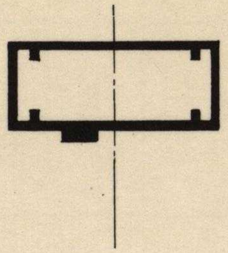


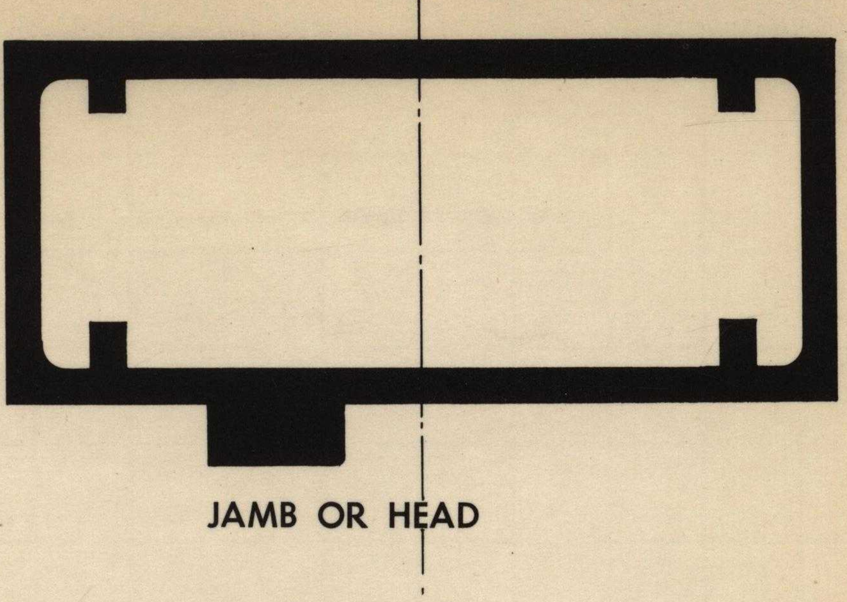
BASE

SECTION C-C

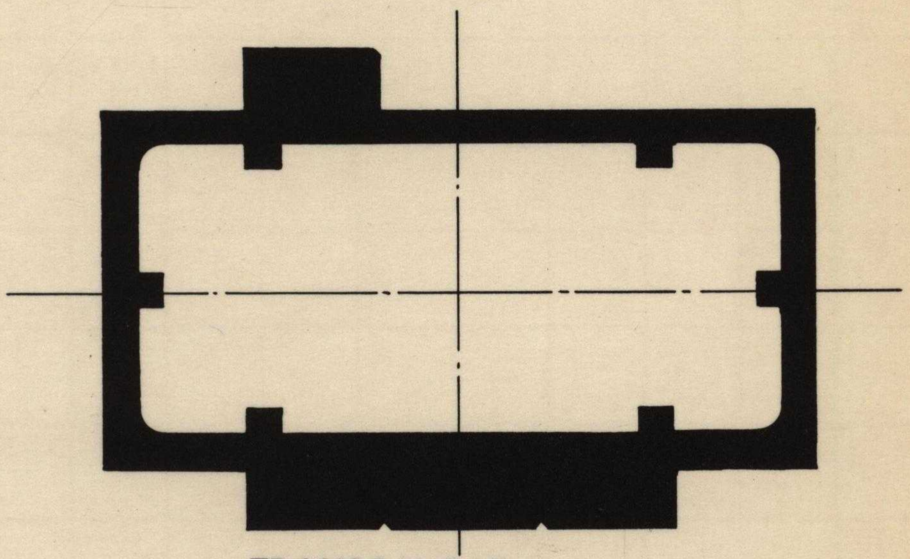
SECTIONS HALF FULL SIZE

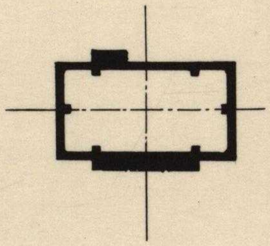




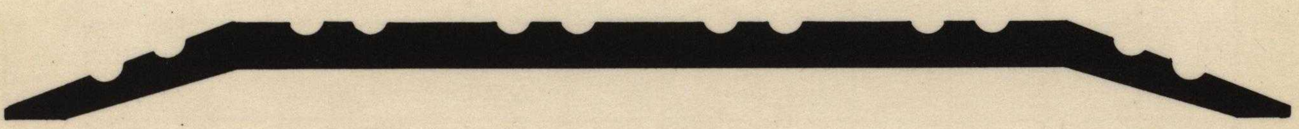


JAMB OR HEAD



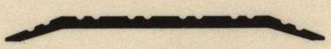


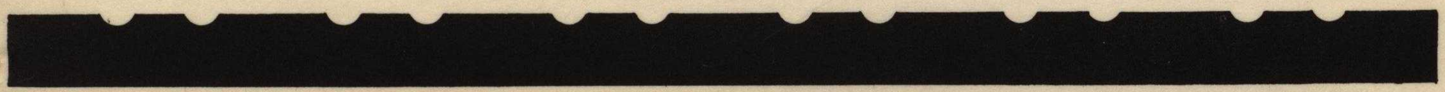
TRANSOM BAR



1/2" x 6 3/4"

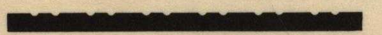
THRESHOLD



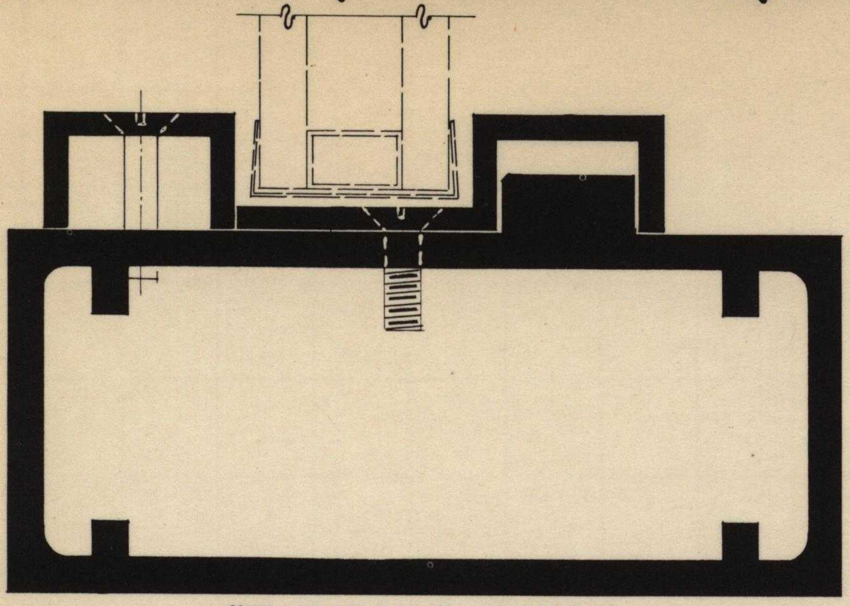


3/8" x 7 1/2"

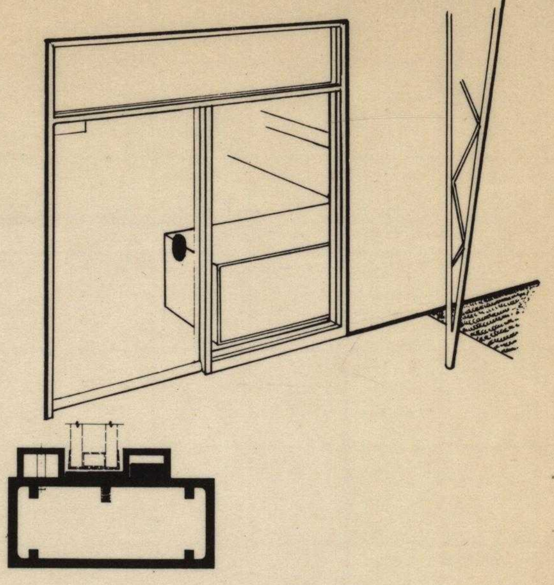
THRESHOLD

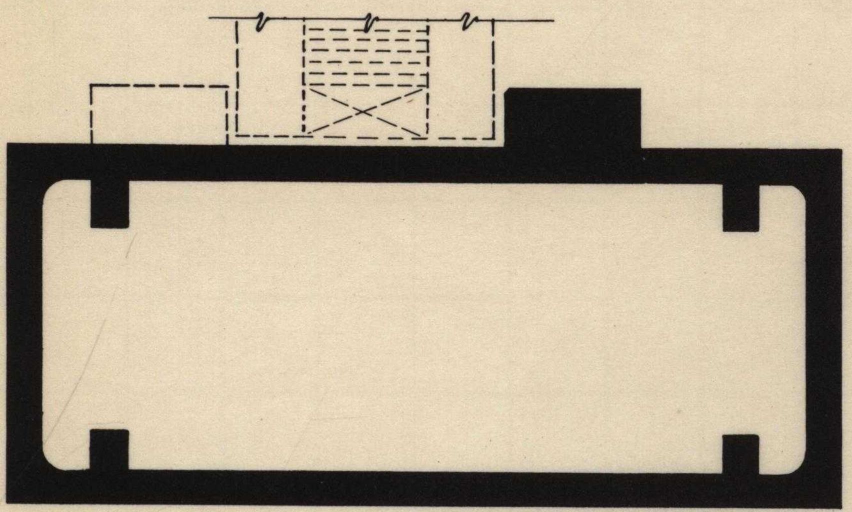


FULL AND QUARTER SIZE

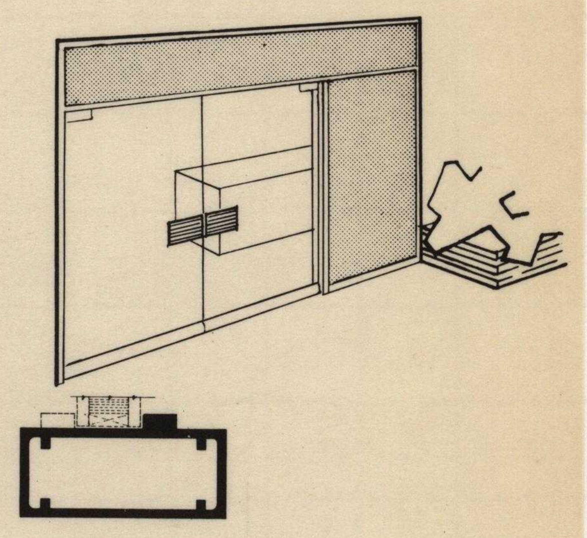


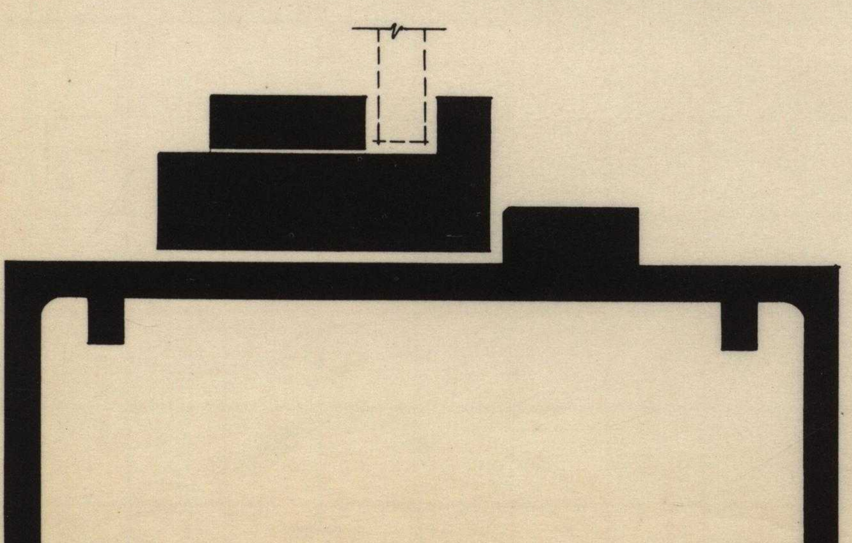
"TWINDOW" GLAZING



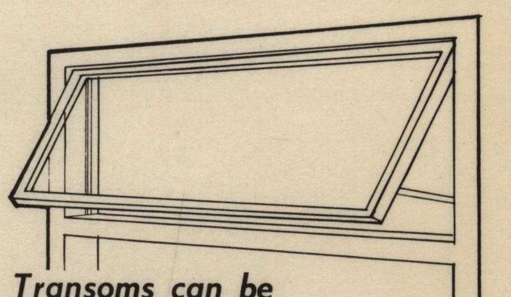


INSULATED CARRARA GLASS PANELS

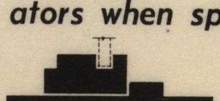




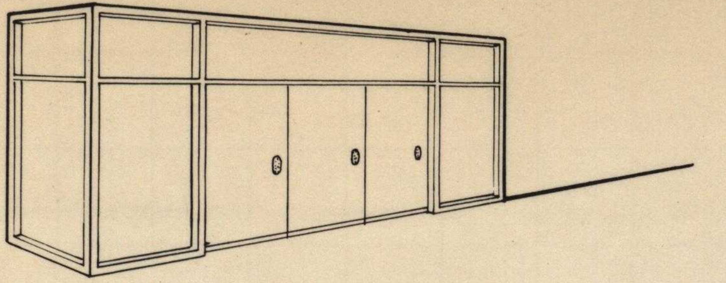
TRANSOM

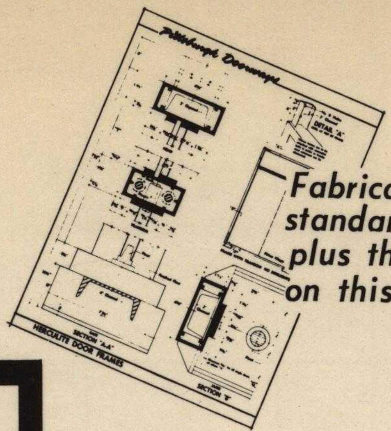


Transoms can be pivoted or hinged, and provided with mechanical operators when specified

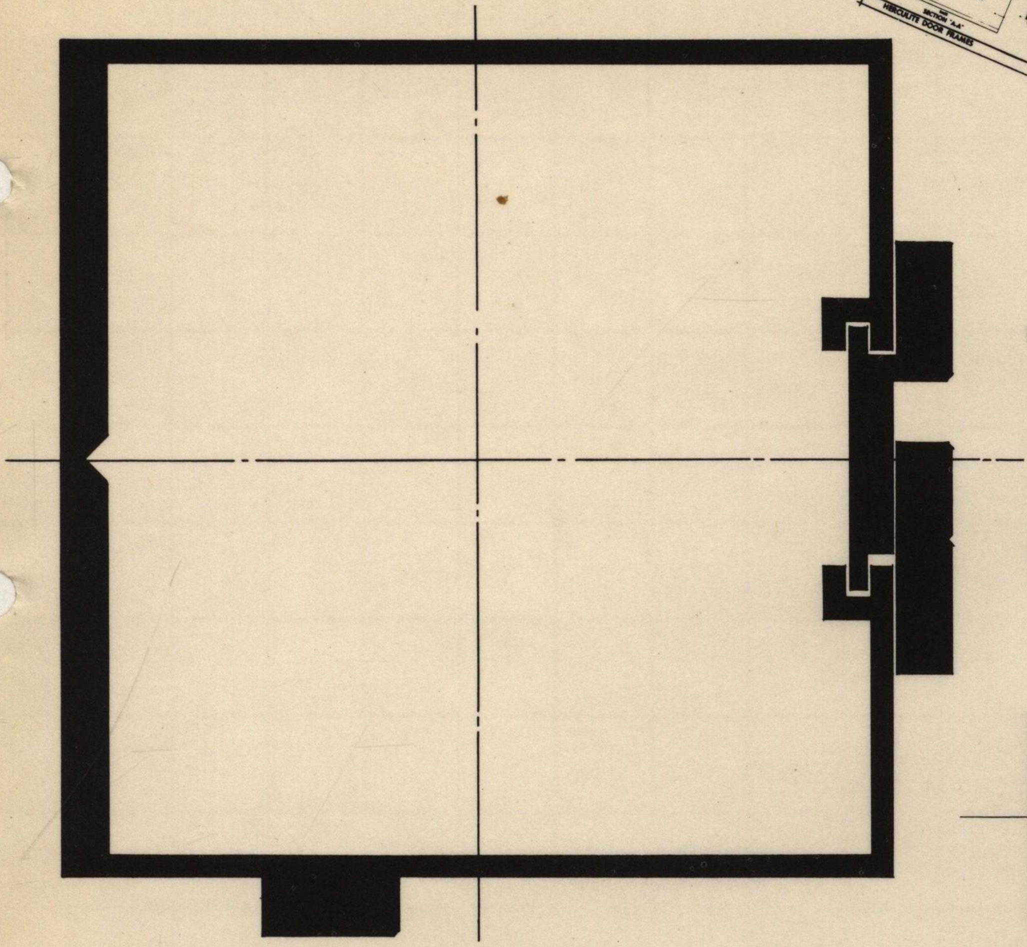


FULL AND QUARTER SIZE



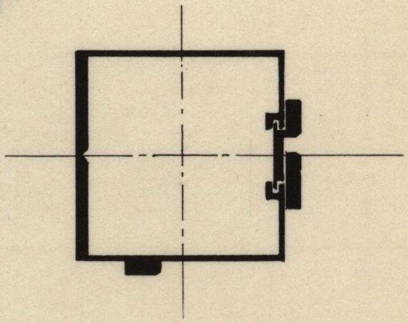


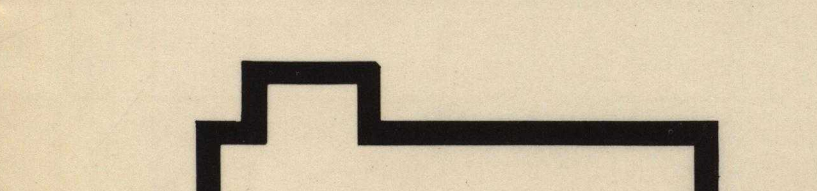
Fabricated from standard sections plus those shown on this page.



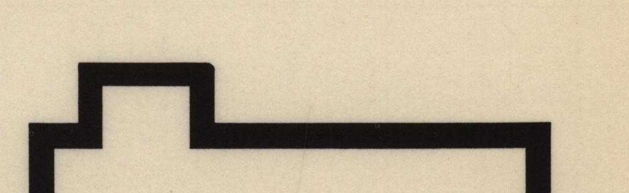
CORNER POST

Four and three-eighths inch square section for corner construction of custom Herculite Door Frames. Stop members applied as needed for setting plate glass. Junior mullion section for use in Custom Herculite Door Frames.

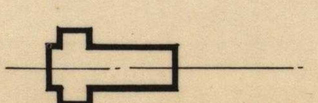


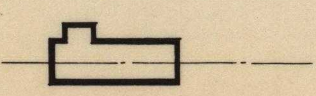


JUNIOR MULLION

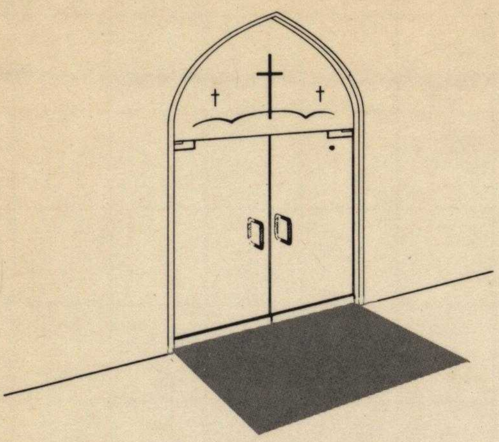


JUNIOR JAMB OR HEAD

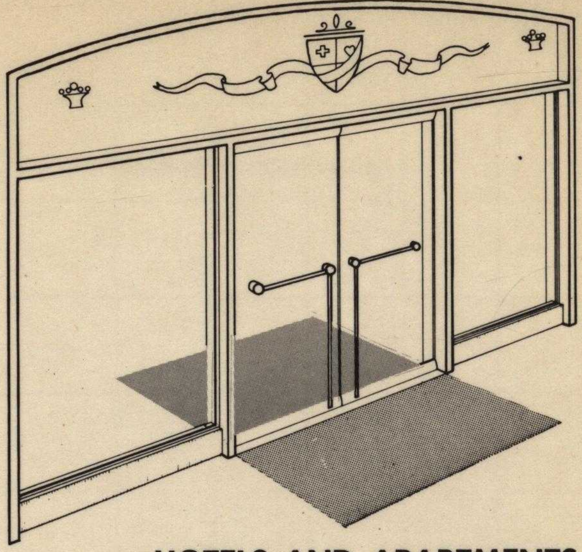




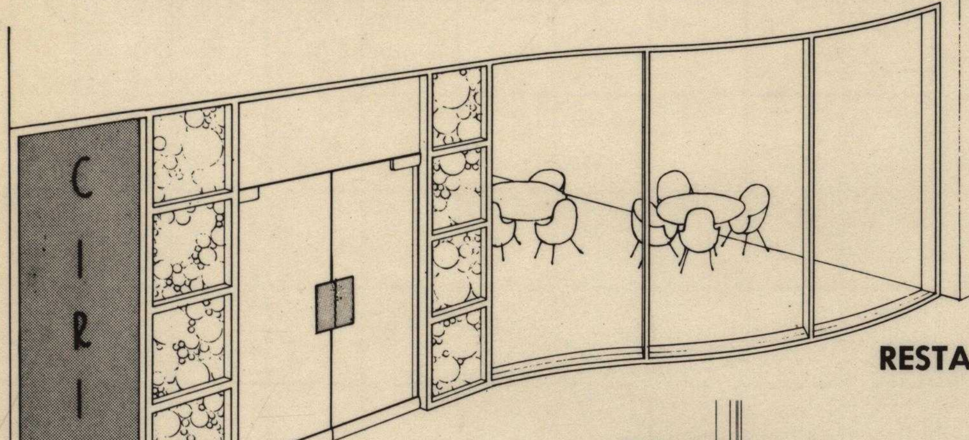
FULL AND QUARTER SIZE



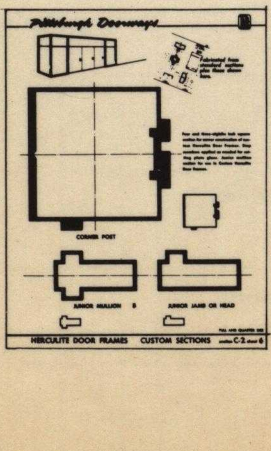
CHURCH BUILDINGS

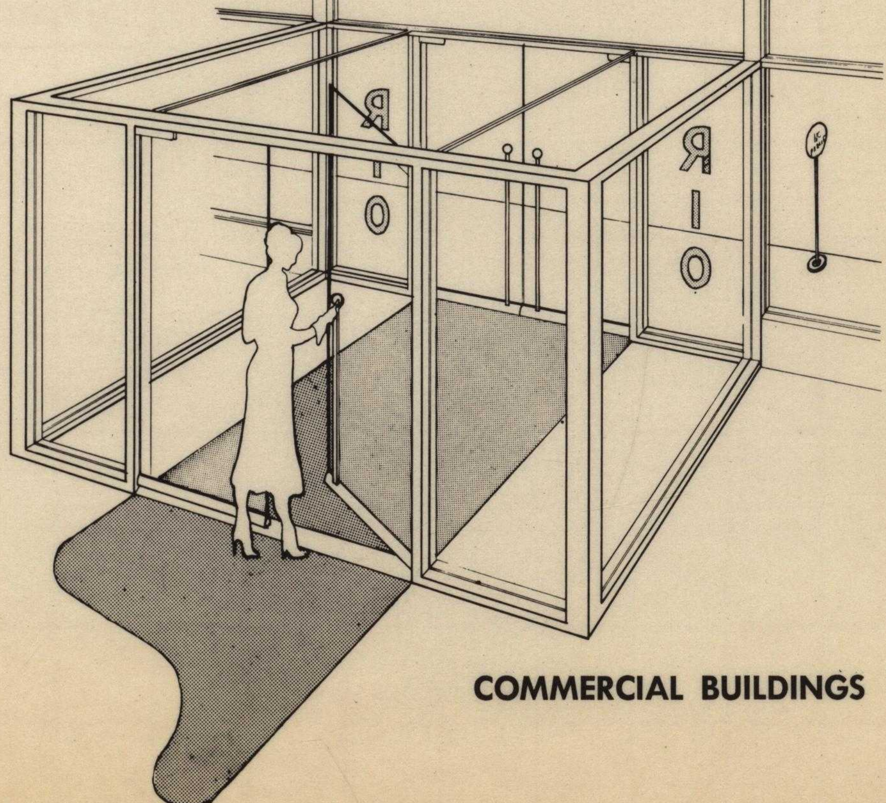


HOTELS AND APARTMENTS



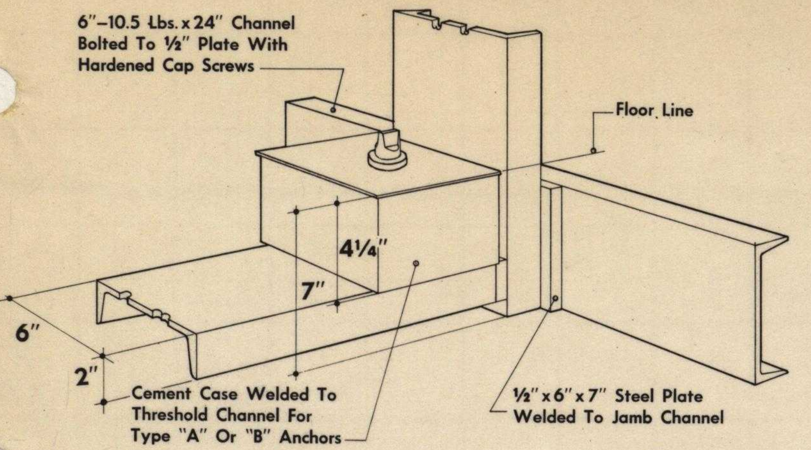
RESTAURANTS AND LOUNGES



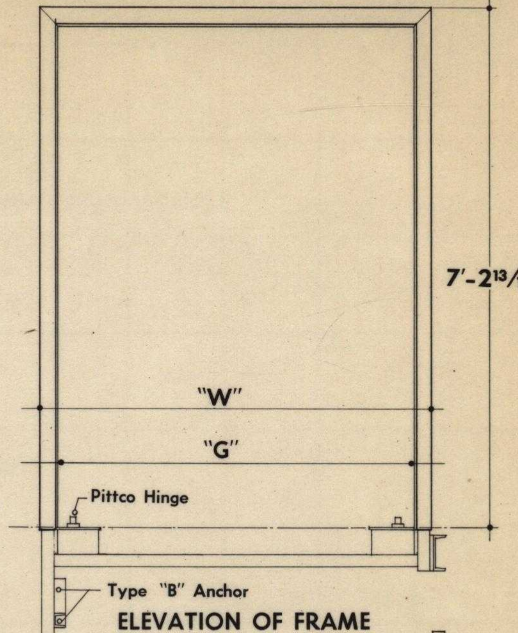


COMMERCIAL BUILDINGS

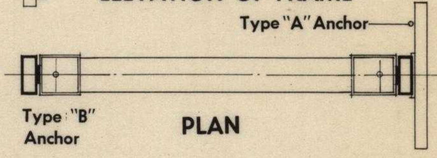
NO SCALE


6"–10.5 Lbs. x 24" Channel Bolted To ½" Plate With Hardened Cap Screws
Floor Line
4¼"
7"
6"
2"
Cement Case Welded To Threshold Channel For Type "A" Or "B" Anchors
½" x 6" x 7" Steel Plate Welded To Jamb Channel

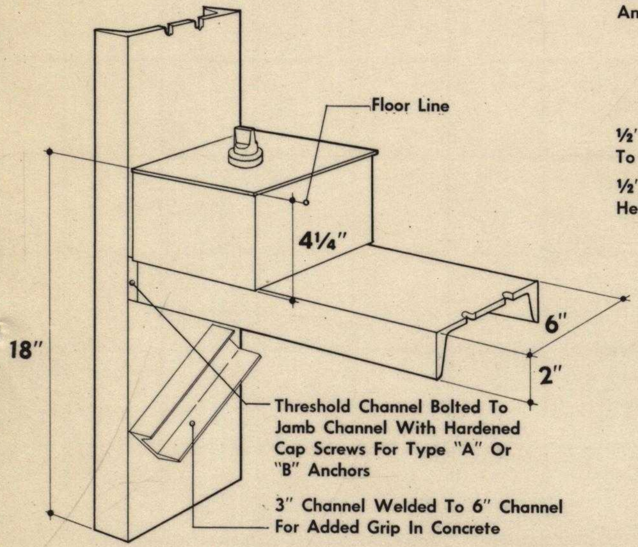
DETAIL OF ANCHOR TYPE "A"



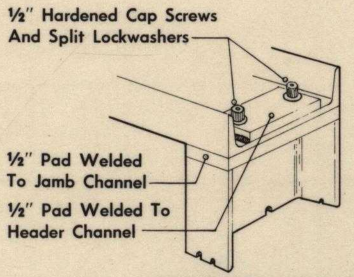
ELEVATION OF FRAME



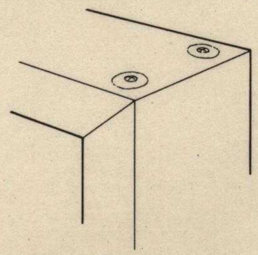
PLAN


Floor Line
18"
4¼"
6"
2"
Threshold Channel Bolted To Jamb Channel With Hardened Cap Screws For Type "A" Or "B" Anchors
3" Channel Welded To 6" Channel For Added Grip In Concrete

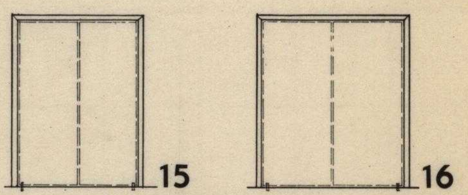
DETAIL OF ANCHOR TYPE "B"


½" Hardened Cap Screws And Split Lockwashers
½" Pad Welded To Jamb Channel
½" Pad Welded To Header Channel

DETAIL OF CORNER REINFORCEMENT



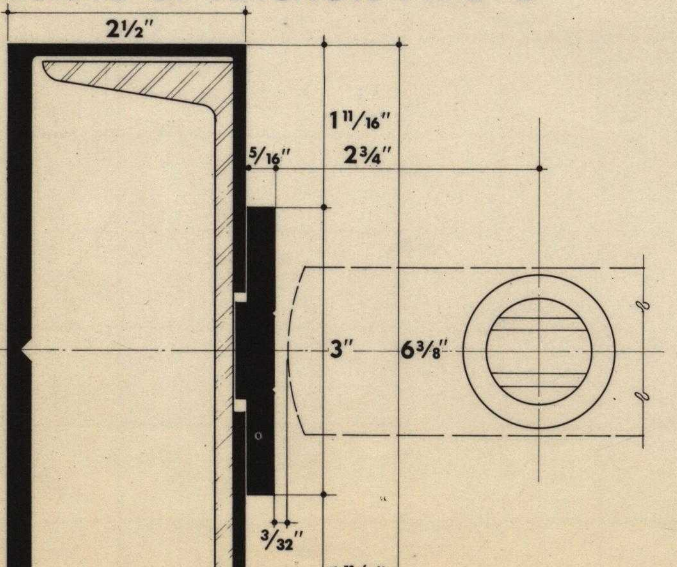
DETAIL OF CASING



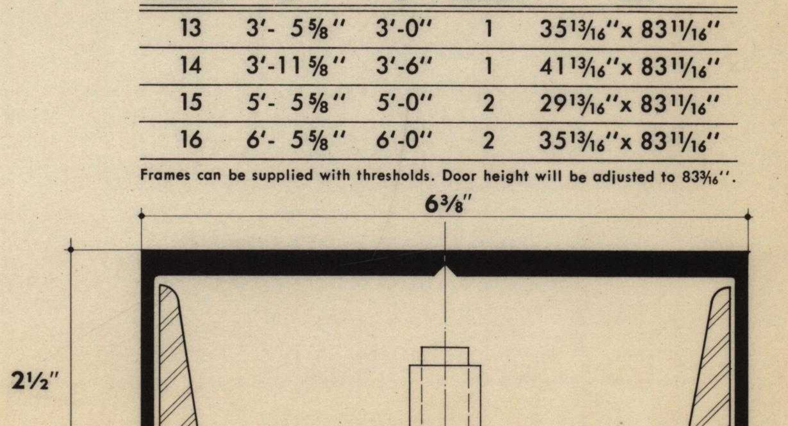
STYLE NUMBERS

DOOR FRAME	DIMENSIONS		DOOR	
STYLE No.	"W"	"G"	QUANTITY	SIZE
13	3'- 5⅝"	3'-0"	1	35 13/16" x 83 11/16"
14	3'-11⅝"	3'-6"	1	41 13/16" x 83 11/16"
15	5'- 5⅝"	5'-0"	2	29 13/16" x 83 11/16"
16	6'- 5⅝"	6'-0"	2	35 13/16" x 83 11/16"

Frames can be supplied with thresholds. Door height will be adjusted to 83 3/16".

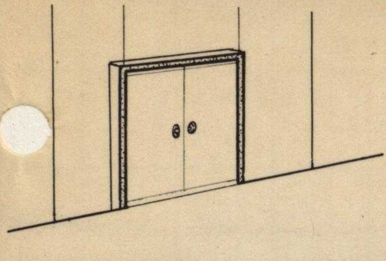


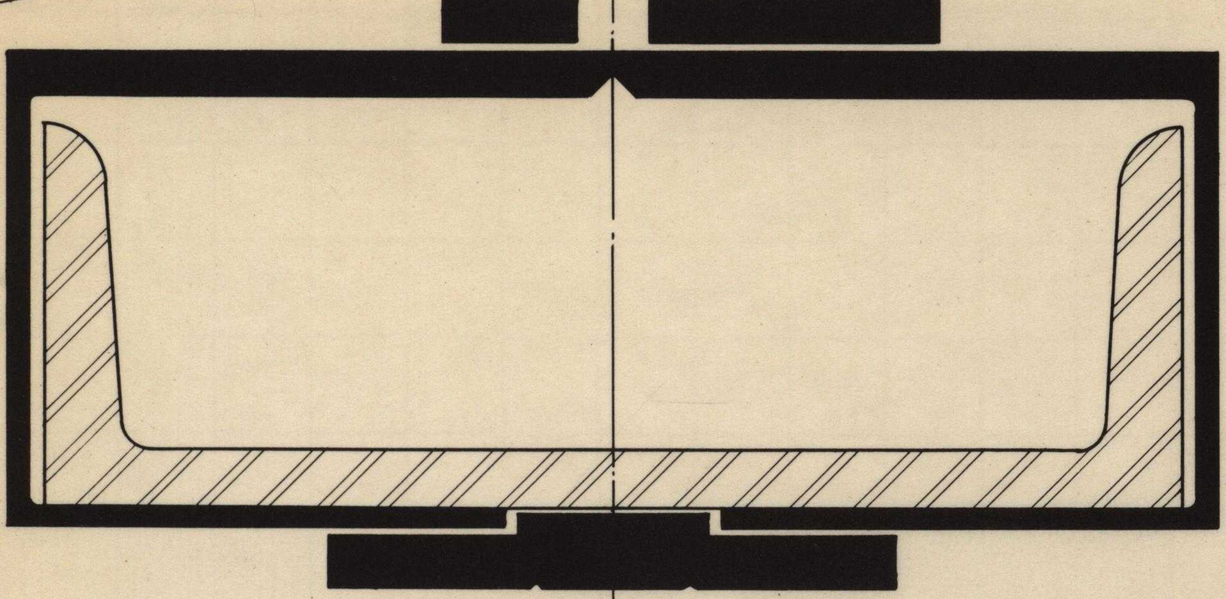
DETAIL OF JAMB



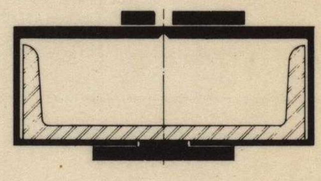
DETAIL OF HEAD

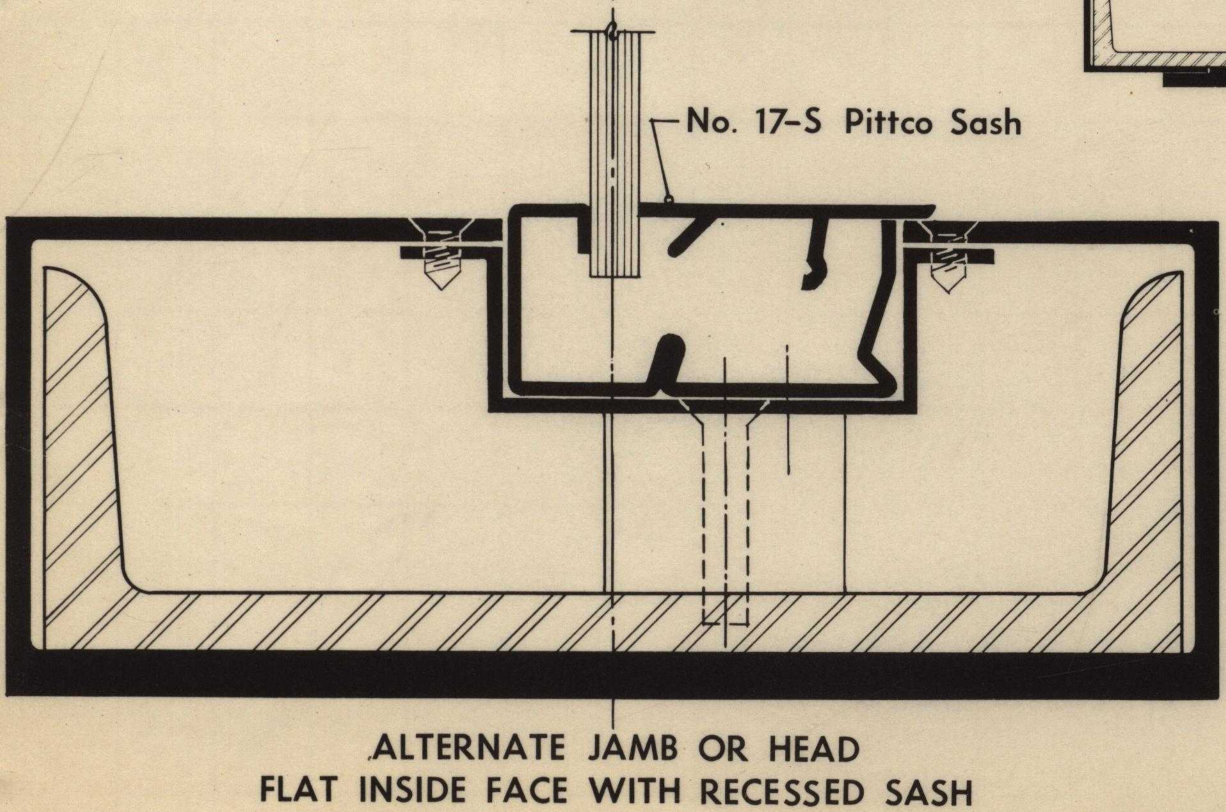
SECTIONS HALF FULL SIZE



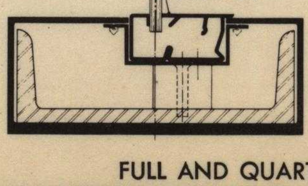


JAMB OR HEAD

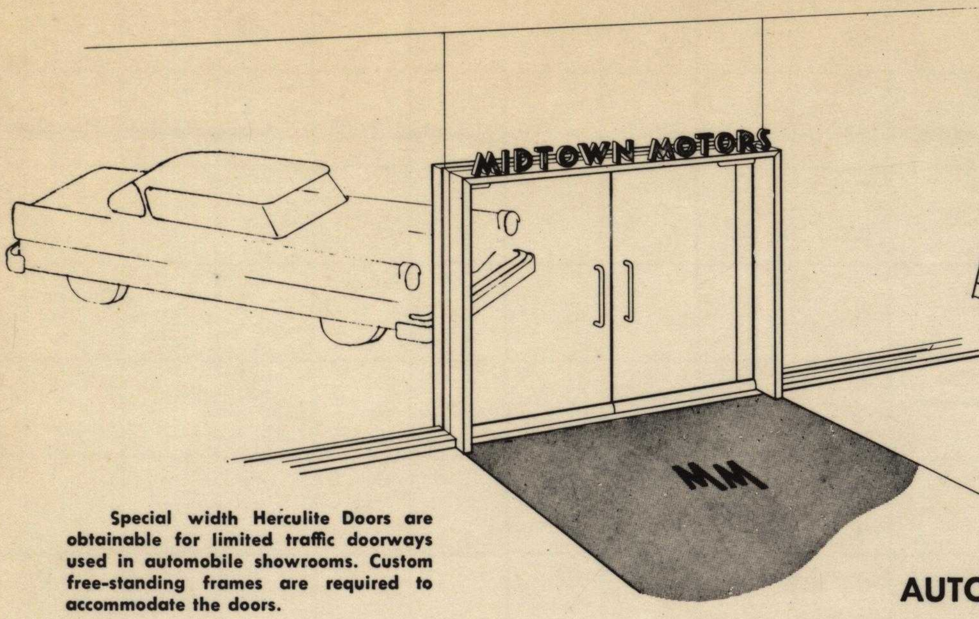


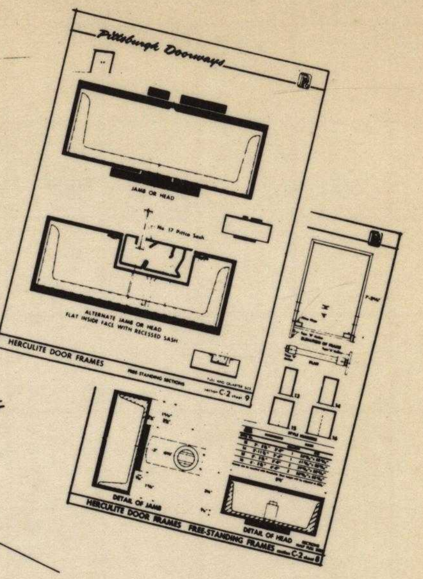


ALTERNATE JAMB OR HEAD
FLAT INSIDE FACE WITH RECESSED SASH



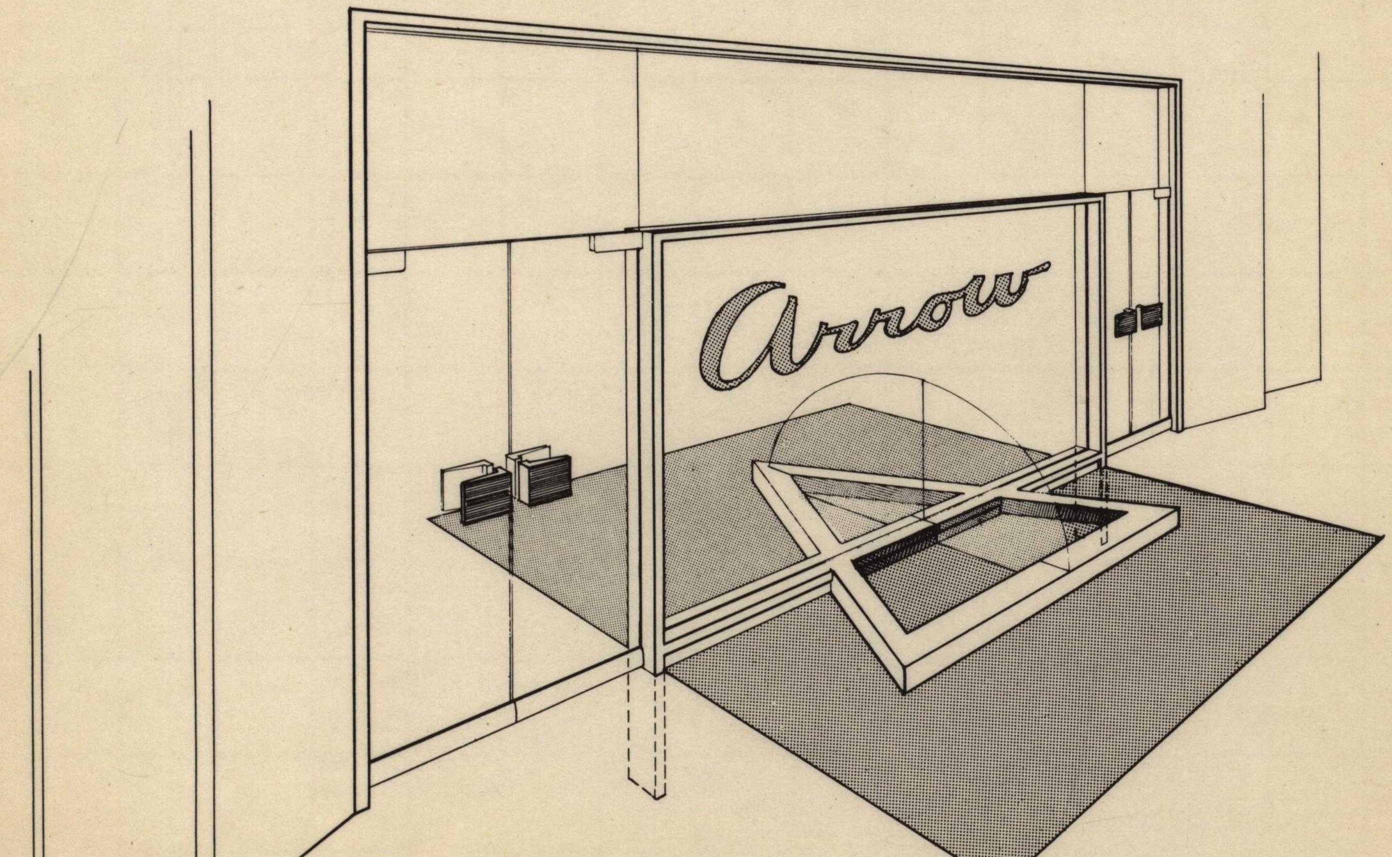
FULL AND QUARTER SIZE





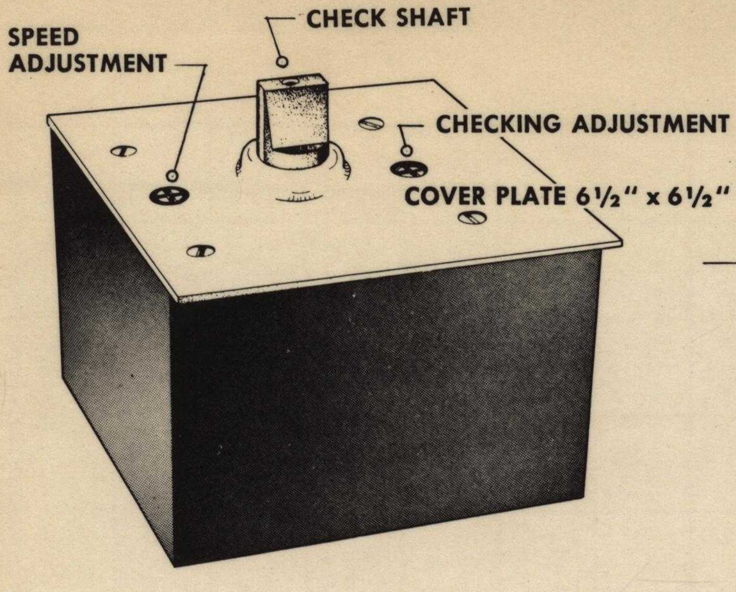
Special width Herculite Doors are obtainable for limited traffic doorways used in automobile showrooms. Custom free-standing frames are required to accommodate the doors.

AUTOMOBILE SHOWROOMS



INDUSTRIAL OFFICES

NO SCALE



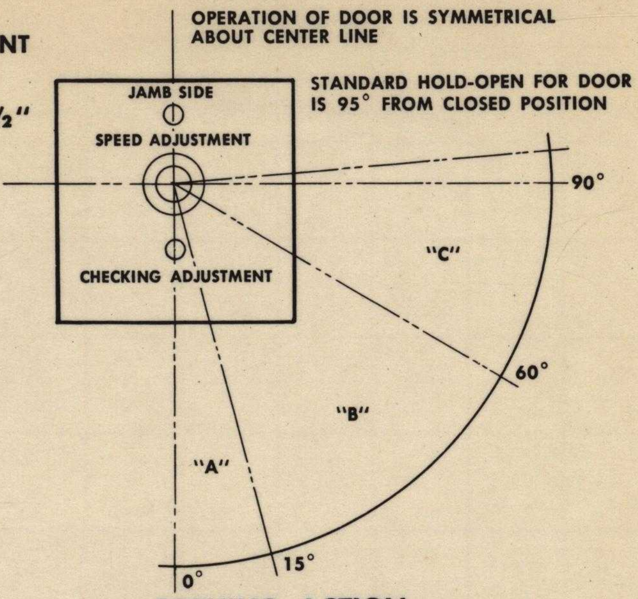
ADVANTAGES

- Positive door speed control.
- Separate checking control.
- Built-in hold-open feature.
- Small size. (Only 6¼"x 6¼"x 4¼")
- Adjustable controls without removing door or threshold.
- Special screws for precision leveling.
- Upper pivot with instantaneous and positive engagement.
- Engineered cycle for opening.
- Sealed in oil for life.
- Can be supplied as either single or double-acting.

The Pittco checking Floor Hinge is a product of the most advanced engineering, plus the best manufacturing practices. High quality Timken roller bearings are used in Pittco Hinges. Precision workmanship upon the finest metals results in durability, efficiency, and trouble-free operation.

Essentially, the operation of the Pittco Hinge is a combined mechanical and hydraulic action. The closing speed and checking are controlled by hydraulic action regulated by control screws on the top face of the hinge. Every Pittco Hinge is tested at 300 pounds per square inch pressure to assure that all hydraulic gaskets are properly sealed. The specific hydraulic fluid used enables the hinges to perform correctly at the extreme high and low temperatures encountered at varying geographic locations.

Pittco Hinges are furnished complete with cement case, top pivot assembly, and fittings required to secure a tempered glass door to the hinge. When Pittco Hinges are to be used on doors other than tempered glass doors, indicate that fact when specifying to obtain the correct hinge arm.


OPERATION OF DOOR IS SYMMETRICAL ABOUT CENTER LINE
STANDARD HOLD-OPEN FOR DOOR IS 95° FROM CLOSED POSITION
JAMB SIDE
SPEED ADJUSTMENT
CHECKING ADJUSTMENT
90°
"C"
60°
"B"
"A"
0°
15°

OPENING ACTION

This diagram shows the action of the Pittco Checking Floor Hinge in opening the door and illustrates the thinking that has gone into its design. Area "A" has the greatest spring load to prevent opening from wind pressure. Area "B" — the arc of greatest use—has a materially reduced spring load, giving the Pittco Hinge the utmost ease of operation. In Area "C" the spring load gradually builds up to give snubbing action against occasional violent opening. At 90° there is a hold-open position that only goes into operation when extra pressure is slowly applied at this point. When specified, Pittco Hinges can be furnished without the hold-open device. Also, they can be furnished with proper accessories for use with wood or other type doors normally installed on pivot hinges.

SELECTION OF TYPE HINGE

Seven types of Pittco Hinges are available. Select the type according to entrance requirements.

No. 120—Double-acting (Swing 1 and 2). Hold open at 95° (When required, No. 120 can be provided with 95° hold-open in one direction and no hold-open in the other direction [open to 87°].)

No. 125—Double-acting (Swing 1 and 2). No hold-open. Opens to 87°. For 34" to 48" width doors.

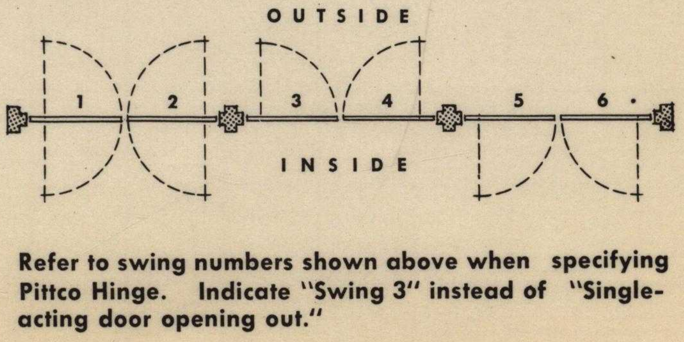
No. 130—Double-acting (Swing 1 and 2). No hold-open. Opens to 87°. For 24" to 33" width doors.

No. 150—Single-acting (Swing 3 and 6). Hold open at 110°.

No. 155—Single-acting (Swing 4 and 5). Hold open at 110°.

No. 180—Single-acting (Swing 3 and 6). No hold-open. Opens to 100°.

No. 185—Single-acting (Swing 4 and 5). No hold-open. Opens to 100°.



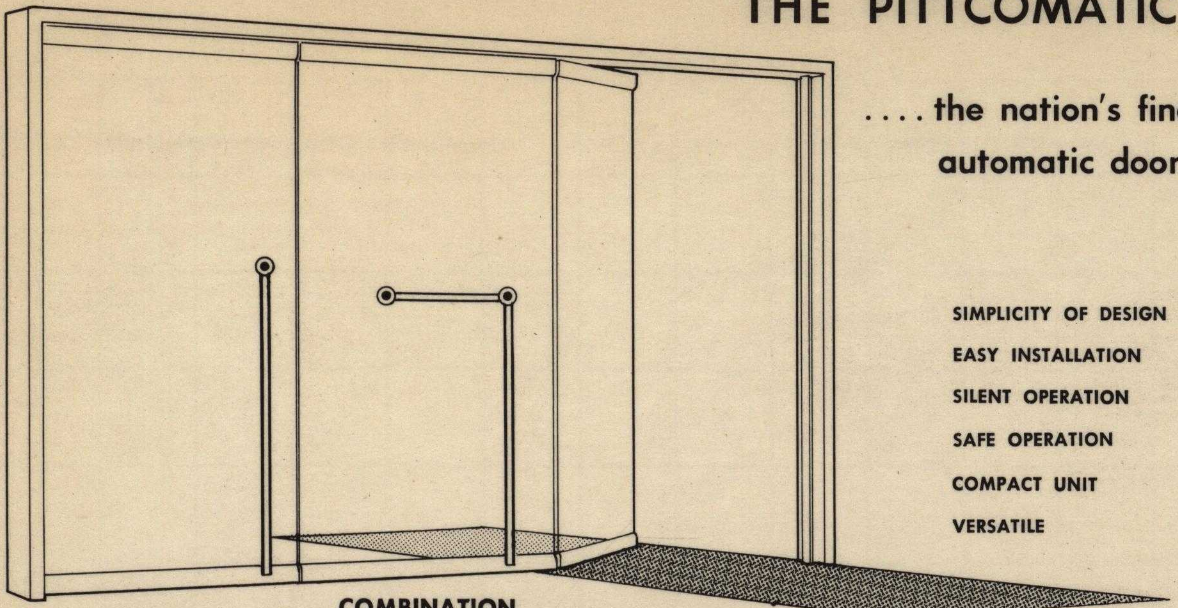
Refer to swing numbers shown above when specifying Pittco Hinge. Indicate "Swing 3" instead of "Single-acting door opening out."

NO SCALE

THE PITTCOMATIC HINGE

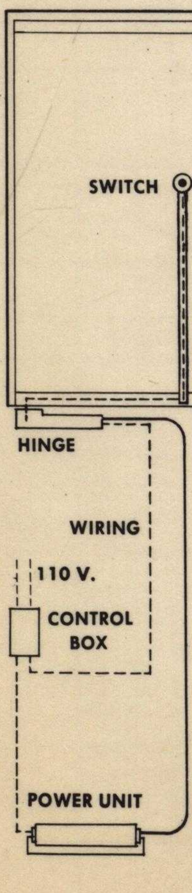
. . . . the nation's finest
automatic door operator

SIMPLICITY OF DESIGN
EASY INSTALLATION
SILENT OPERATION
SAFE OPERATION
COMPACT UNIT
VERSATILE



VERTICAL HANDLE ACTIVATION	COMBINATION VERTICAL-HORIZONTAL HANDLE ACTIVATION	MAT ACTIVATION
FOR DOUBLE OR SINGLE ACTING DOORS		SINGLE ACTING DOORS ONLY

TYPICAL PITTCOMATIC INSTALLATIONS



HYDRAULIC LINES 50' MAX. LENGTH OVER 30' LINES MUST BE ½". CONSULT WHERE LINES MUST EXCEED 50'.

The Pittcomatic hinge is an automatic door opener with electrical activation and hydraulic operation. The closing cycle features the same type of checking and speed controls as used in the Pittco Hinge. The opening or closing of the door can easily be stopped at any point in its arc providing a safety feature. When the power is off the door can still be operated manually.

Single or double acting operation with handle activation by a 10 volt switch allows the door to be used freely in all style entrances including those at the sidewalk line. Mat operators with single acting operation may be used when more remote activation is desirable.

DIMENSIONS

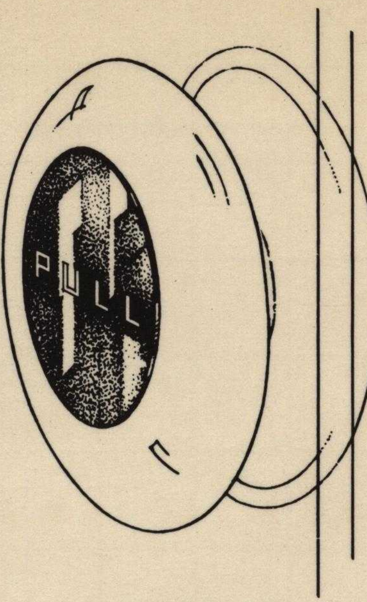
- POWER UNIT—allow space 9" W x 36" L x 9"H
- CONTROL BOX—6"W x 10"H x 4"D
- HINGE CASE—6¼"W x 18" x 4½"D
- ELECTRIC CONDUIT—½" (BY OTHERS)
- HYDRAULIC LINES—two ⅜" Copper or S. S. tubing
- MOTOR—⅓ H.P. 110 V. 1725 R.P.M.

NO SCALE

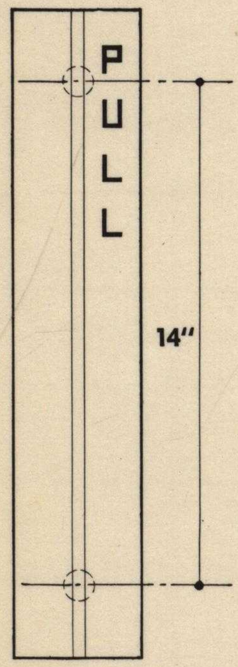
The selection of the handles for Herculite Doors can greatly influence the character of the doorway. The functional use of the handle is important to control traffic flow, ease of operation and safety. The style can quickly show the type of building whether it be commercial, industrial, or institutional.

The stock items shown are available for use with Herculite Doors. A complete catalogue illustrating the line of stock items is available on request.

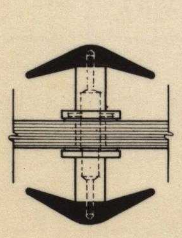
Push-Pull handles are available in Aluminum or Bronze. Certain styles may be obtained in Stainless Steel. Chrome plated handles are not recommended.



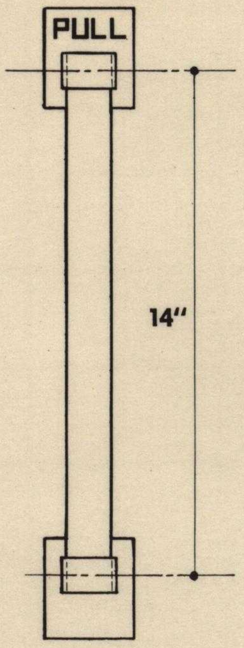
STYLE 300



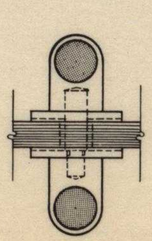
ELEVATION



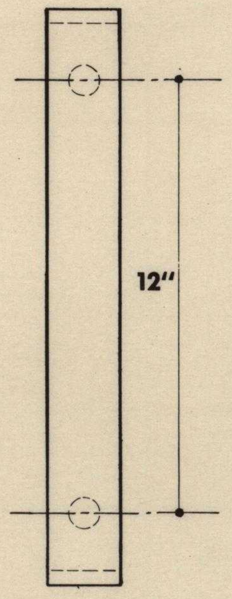
PLAN
STYLE 100



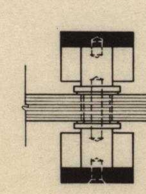
ELEVATION



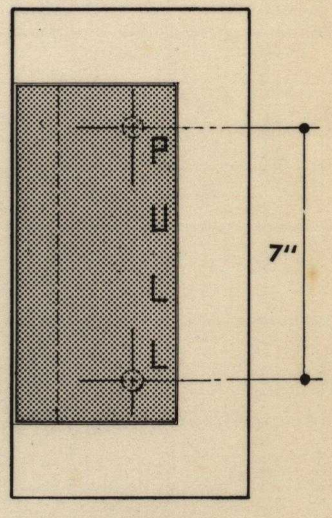
PLAN
STYLE 120



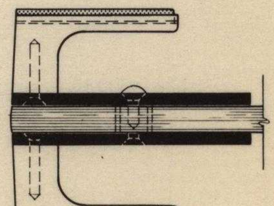
ELEVATION



PLAN
STYLE 190



ELEVATION



PLAN
STYLE 200

GENERAL INFORMATION

NO SCALE

Carrara STRUCTURAL GLASS

SECTION D-1 CARRARA STRUCTURAL GLASS

CARRARA STRUCTURAL GLASS SPECIFICATIONS

EXTERIOR CARRARA INSTALLATIONS

General Conditions

The "General Conditions" of the contract are a part of these specifications.

Scope of the Work

This contractor shall furnish all material, labor and service to properly install all Carrara Structural Glass shown on drawings and specified hereinafter.

This contractor shall verify all dimensions at the building, prepare shop drawings and furnish the architect with three sets of prints for approval.

Other contractors shall prepare rough walls as required, same to be rigid, incombustible surface, set plumb and true. The setting space for the Carrara and mastic cement is to be in accordance with the manufacturer's requirements. Unless otherwise specified, other contractors shall provide and install flashing materials to allow this contractor to satisfactorily caulk and flash the Structural Glass at the completion of his work.

Installation of the Carrara is to be made according to manufacturer's recommendations and to the satisfaction of the architect. This contractor, before setting the Structural Glass shall size the rough walls with an approved type of asphaltic bond coat. All Carrara shall be set plumb and true and with even flush joints which shall be filled with an approved type of pointing compound.

This contractor must do all cutting and drilling of Carrara for other contractors, provided they furnish him with accurate layouts so that the work may be done at the factory. This contractor must do all sand-blasting, painting and/or laminating of signs or decoration that is to be an integral part of the Carrara.

Materials

All structural Glass shall be Carrara, as made by Pittsburgh Plate Glass Company, of size, thickness and color indicated on the drawings or hereinafter. Finish of face of glass to be polished and/or rough texture as specified, with all exposed edges polished.

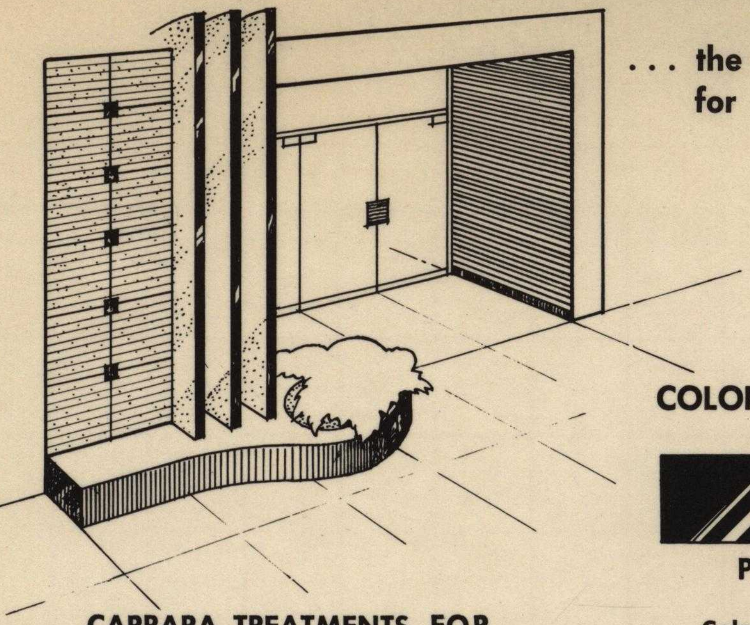
Thickness of Carrara to be as indicated on the drawings with none less than 11/32".

All setting materials such as bond coat, mastic, and pointing compound is to be of a type tested and approved by the Structural Glass manufacturer.

At the completion of his work, this contractor shall remove all rubbish not caused by other trades, clean the Carrara and leave it in satisfactory condition.

NOTE:

All Pittco Storefront Metal as required for the trim on Carrara Structural Glass shall be specified under Storefront Metal Work. This metal trim is to be installed in coordination with the Carrara to conform to the details shown on the drawings. The installations shall be in accordance with the manufacturer's recommendations and to the satisfaction of the architect.



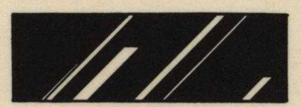
... the quality structural glass
for enduring modern appearance.

CARRARA TREATMENTS FOR UNLIMITED DESIGNS

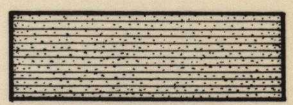
- Bending
- Laminating
- Sand blasting
- Tempering
- Ceramic Enameling

ARCHITECTURAL BEAUTY

COLORFUL • DURABLE • VERSATILE



POLISHED



ROUGH TEXTURE

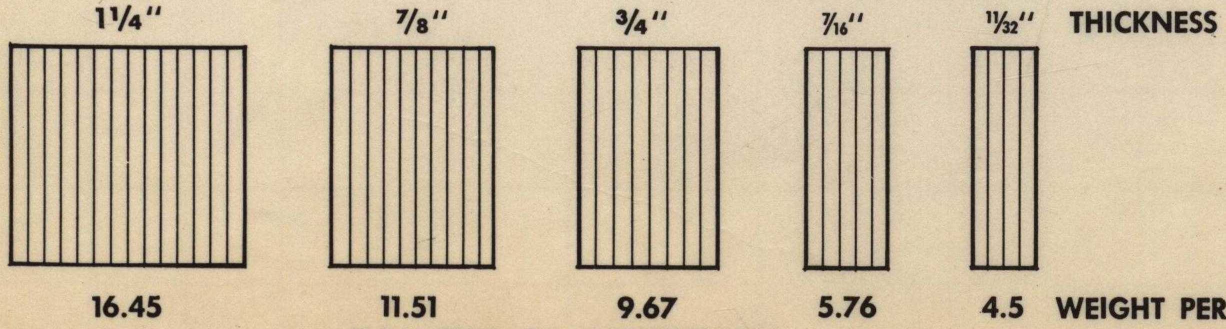
Colorful Carrara provides a material of unlimited design possibilities. The distinctive colors have been designed to harmonize with any color scheme as required for commercial, industrial, or institutional architecture. Aluminum or bronze Pittco storefront metals enhance the beauty of this material. The never-fade, never-stain, never-buckle characteristics assure the retention of the original color and beauty.

Since Carrara can be used as successfully on the interior as well as the exterior, it is often desirable to extend the Carrara into the entrance and lobby for a spacious appearance.

CARRARA COLORS

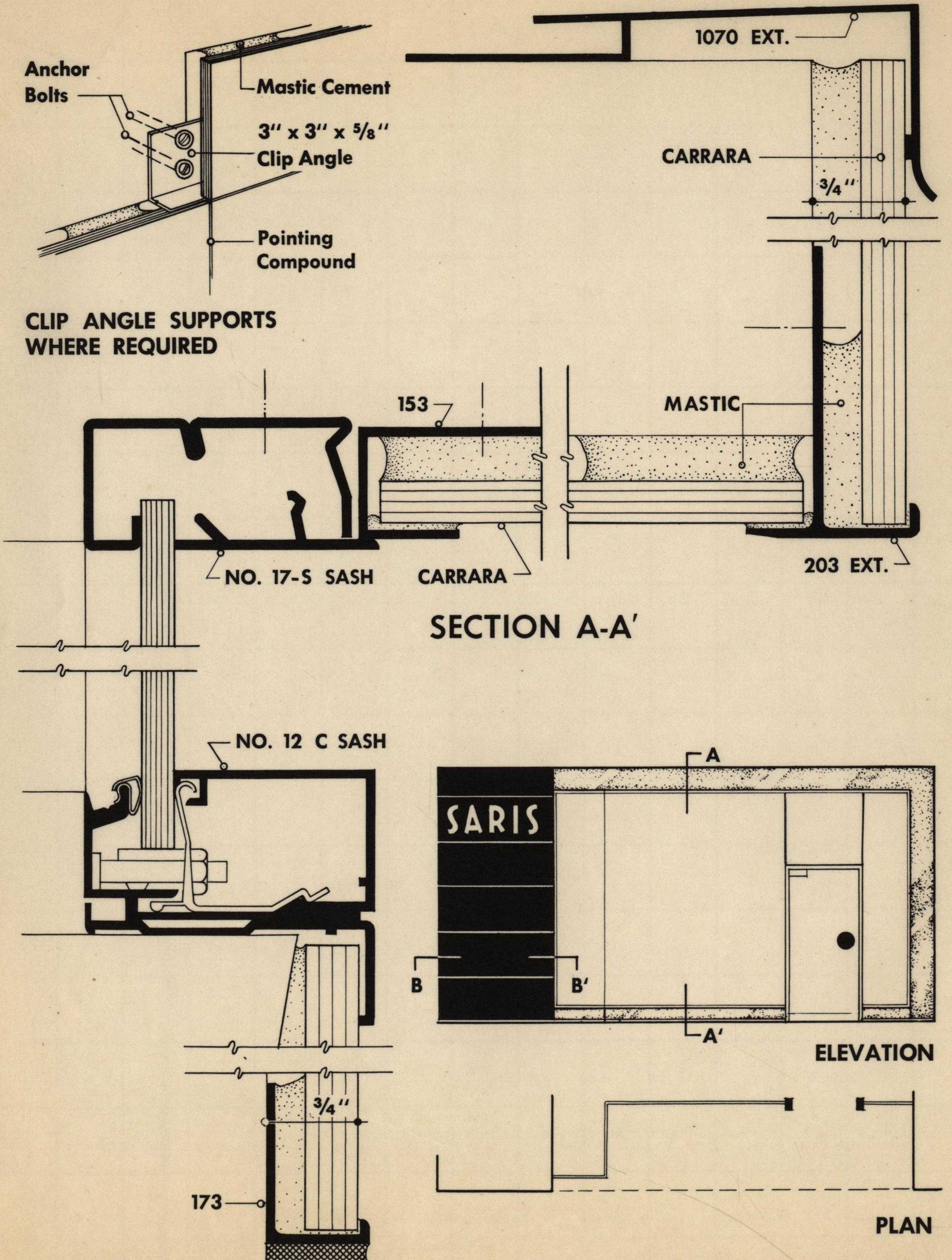
WHITE	ALL THICKNESSES
BLACK	ALL THICKNESSES (ALSO 1/4")
IVORY	ALL THICKNESSES (EXCEPT 3/4")
GRAY	ALL THICKNESSES (EXCEPT 3/4")
TRANQUIL GREEN	ALL THICKNESSES (EXCEPT 3/4")
FOREST GREEN	11/32" THICKNESS ONLY
WINE	11/32" THICKNESS ONLY
REMBRANDT BLUE	11/32" THICKNESS ONLY
SHELL PINK	11/32" THICKNESS ONLY
GUNMETAL	11/32" THICKNESS ONLY

Carrara in thicknesses 1 1/4", 7/8", and 1/4" as listed available with both faces polished.



FULL SIZE OF THICKNESSES

NO SCALE



CLIP ANGLE SUPPORTS WHERE REQUIRED

SECTION A-A'

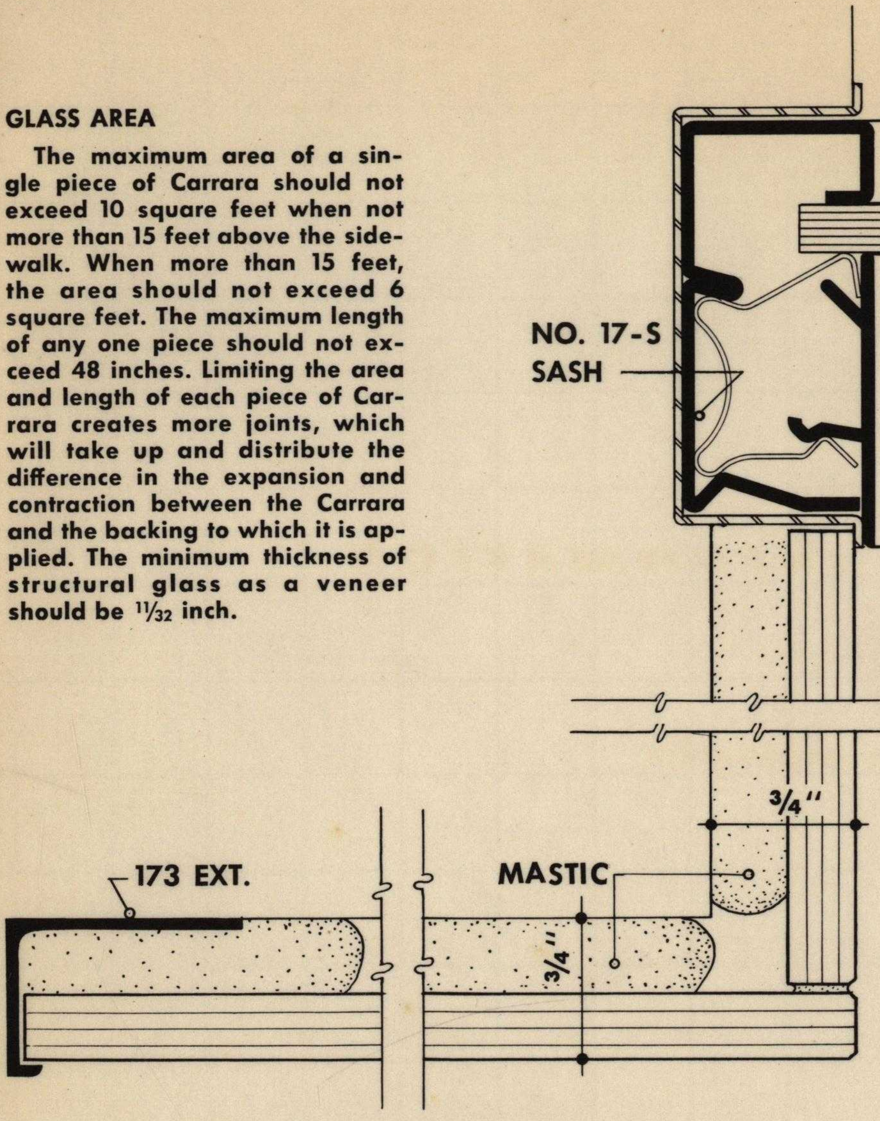
ELEVATION

PLAN

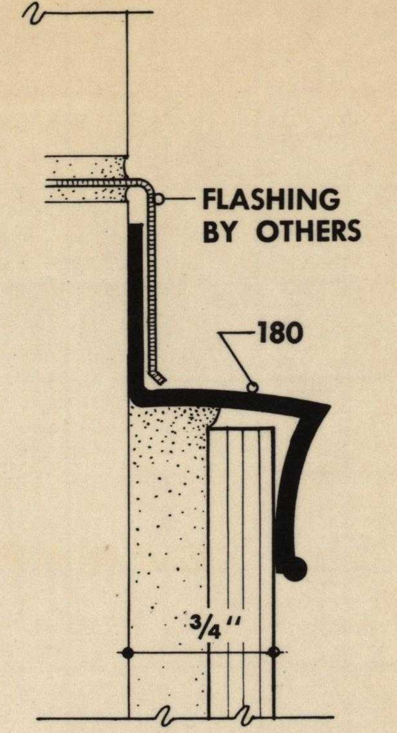
SECTIONS FULL SIZE

GLASS AREA

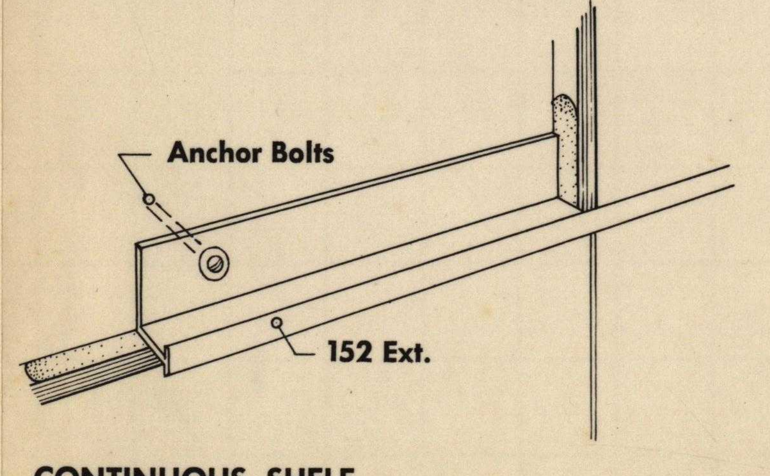
The maximum area of a single piece of Carrara should not exceed 10 square feet when not more than 15 feet above the sidewalk. When more than 15 feet, the area should not exceed 6 square feet. The maximum length of any one piece should not exceed 48 inches. Limiting the area and length of each piece of Carrara creates more joints, which will take up and distribute the difference in the expansion and contraction between the Carrara and the backing to which it is applied. The minimum thickness of structural glass as a veneer should be 11/32 inch.



SECTION B-B'



ALTERNATE DETAIL OF CAP MOULDING



CONTINUOUS SHELF ANGLE SUPPORT

Quality storefront construction can be achieved when Carrara is installed on a good backing with Pittco Store-Front Metal as detailed. The cardinal principle for a successful installation is that Carrara must be set free from strain or the possibility of strain due to a subsequent movement of the building. When this principle is followed a Carrara front will look as well in later years as the day it is installed.

Carrara can be installed as a veneer over almost any firm, true, sub-wall. A wood backing should not be used.

The space for the asphalt type mastic cement should be about 3/8", not less than 3/16" nor more than 1/2".

For additional Carrara Trim Mouldings see section A-5 sheet 4.

GENERAL INFORMATION

SECTION E-1 GENERAL INFORMATION

CHECK LIST OF PITTSBURGH GLASS PRODUCTS

PRODUCT	QUALITIES	THICKNESSES	RECOMMENDED MAX. SIZES	WEIGHTS PER SQ. FT.	STRENGTH	COLORS	FINISH
Polished Plate Glass	Silvering Mirror Glazing Glazing	⅛″ ¼″	⅛″ 72x123 ¼″ 130x216	⅛″ 1.64 lbs. ¼″ 3.29 lbs.	Tension 6500 lbs. [″] Compression 36,000 lbs. [″] Modulus Elasticity 10,000,000 lbs. [″]	Clear	Ground and Polished
Heavy Plate Glass	Commercial Selected	⅜″ ½″ ⅝″ ¾″ ⅞″ 1″ 1¼″	⅜″ 72x188 ½″ 72x188 ⅝″ 72x160 ¾″ 72x160 ⅞″ 70x148 1″ 70x148 1¼″ 69x148	⅜″ 4.93 lbs. ½″ 6.58 lbs. ⅝″ 8.22 lbs. ¾″ 9.67 lbs. ⅞″ 11.52 lbs. 1″ 13.16 lbs. 1¼″ 16.45 lbs.	In direct proportion to the square of the thickness	Clear	Ground and Polished
Solex Heat-Absorbing Plate Glass	Glazing only	¼″	129x216	3.29 lbs.	Same as regular plate glass	Bluish Green	Ground and Polished
Blue Plate Glass	Selected only	13/64″	72x188	2.67 lbs.	Same as regular plate glass	Blue	Ground and Polished
Flesh Tinted Plate Glass	Selected only	13/64″	72x188	2.67 lbs.	Same as regular plate glass	Flesh tinted	Ground and Polished
Twindow Insulating Units	Plate Glass—Glazing Window Glass—"A" Rolled Glass—Standard	Double-Glazed Unit: ¼″ Airspace ⅛″ glass— ½″±1/16″ ¼″ glass—13/16″±1/32″ ½″ Airspace ⅛″ glass—13/16″±1/32″ ¼″ glass—1 1/16″±1/32″	Double-Glazed Unit: ⅛″—10 sq. ft. ¼″—70 sq. ft.	Double-Glazed Unit: ⅛″—3½ lbs. ¼″—7 lbs.	Write for details	Dependent on glass used	Same as glass used
Multiplate Bullet-Resisting Plate Glass	Commercial	¾″ ⅞″ 1″ 1 3/16″ (Super) 1 9/16″ (Hi-Resist) 2″ (Hi-Power) 2½″ 3″	48x84	¾″ 9.71 lbs. ⅞″ 11.36 lbs. 1″ 13.01 lbs. 1 3/16″ 14.88 lbs. 1 9/16″ 20.04 lbs. 2″ 27.97 lbs. 2½″ 33.03 lbs. 3″ 39.63 lbs.	For recommendations of protection against various firearms, write us	Clear	Ground and Polished Plate Glass laminated
X-Ray Lead Glass	Glazing only	5.35 to 7.35 m/m	40x72	5½ lbs.	Approx. ⅔ as strong as plate glass of equal thickness	Golden Yellow	Ground and Polished
Herculite Plate Glass	Same as glass before tempering	Same as glass before tempering	72x108	Same as glass before tempering	Approx. 4 times that of glass of equal thickness which has not been tempered	Same as glass before tempering	Same as glass before tempering
Herculite Doors	Selected	¾″	72x108	9.67 lbs. plus hardware	Approx. 4 times that of ¾″ glass which has not been tempered	Clear	Ground and Polished
Carrara Structural Glass	Selected	Black, ¼″, 11/32″, 7/16″, ¾″, ⅞″, 1¼″ White, Gray, Ivory, 11/32″, 7/16″, ¾″, ⅞″, 1¼″ Tranquil Green, 11/32″, 7/16″, ⅞″, 1¼″ Forest Green, Shell Pink, Wine, Rembrandt Blue, Gunmetal, 11/32″ only	72x130	¼″ 3.29 lbs. 11/32″ 4.5 lbs. 7/16″ 5.76 lbs. ¾″ 9.87 lbs. ⅞″ 11.51 lbs. 1¼″ 16.45 lbs.	Approx. same as regular plate glass	Tranquil Green, Ivory, Gray, White, Black, Wine, Rembrandt Blue, Gunmetal, Shell Pink and Forest Green (All Opaque)	Ground and Polished one side. ¼″ black, ⅞″ and 1¼″ also polished both sides
Pittsburgh Mirrors Regular Copper-Back Structural	Silvering Mirror Glazing Glazing	Fabricated from any thickness of glass	Regular—Up to max. glass size. Copper-Back and Structural 74x144	Approx. same as plate glass	Approx. same as plate glass	Plain, Blue, Flesh Tinted, Blue-Green	Silver, gold or gun-metal backing on any color glass
Tapestry Glass	Glazing	7/32″	60x144	2.89 lbs.	Equal to or greater than that of regular plate glass	Translucent Semi-Opaque	Plain, 7/32″ Polished, 7/32″
Pennvernon Window Glass	AA-A-B Greenhouse	Picture .063-.068 Single Strength .087-.095 Double Strength .118-.133 Heavy Sheet 3/16″—.187 to .200 7/32″—.212 to .225	3′0″x4′2″ 3′4″x4′2″ 5′0″x6′8″ Heavy Sheet 3/16″ up to 50 sq. ft. 7/32″ up to 60 sq. ft.	Picture 13-14 oz. SS 19 oz. DS 26 oz. 3/16″ 40 oz. 7/32″ 45 oz.	Same as plate glass of equal thickness	Clear	Fire-finished
PC Glass Blocks*	Selected	3⅞″ (hollow)	Actual sizes: 5¾″x5¾″ 7¾″x7¾″ 11¾″x11¾″			Clear	Moulded
FOAMGLAS*	Rigid, lightweight, incombustible, long-lasting, cellular glass insulation	2″ 2½″ 3″ 4″ 5″	12″x18″	9 to 11 lbs. per cu. ft.	Send for FOAMGLAS® Booklet		

*Manufactured by Pittsburgh Corning Corporation. Distributed by Pittsburgh Plate Glass Company.

DECIMAL EQUIVALENTS

1/64	.015625	17/64	.265625	33/64	.515625	49/64	.765625
1/32	.03125	9/32	.28125	17/32	.53125	25/32	.78125
3/64	.046875	19/64	.296875	35/64	.546875	51/64	.796875
1/16	.0625	5/16	.3125	9/16	.5625	13/16	.8125
5/64	.078125	21/64	.328125	37/64	.578125	53/64	.828125
3/32	.09375	11/32	.34375	19/32	.59375	27/32	.84375
7/64	.109375	23/64	.359375	39/64	.609375	55/64	.859375
1/8	.125	3/8	.375	5/8	.625	7/8	.875
9/64	.140625	25/64	.390625	41/64	.640625	57/64	.890625
5/32	.15625	13/32	.40625	21/32	.65625	29/32	.90625
11/64	.171875	27/64	.421875	43/64	.671875	59/64	.921875
3/16	.1875	7/16	.4375	11/16	.6875	15/16	.9375
13/64	.203125	29/64	.453125	45/64	.703125	61/64	.953125
7/32	.21875	15/32	.46875	23/32	.71875	31/32	.96875
15/64	.234375	31/64	.484375	47/64	.734375	63/64	.984375
1/4	.25	1/2	.5	3/4	.75	1	1.

SHEET METAL—THICKNESS, GAUGE AND WEIGHT

THICKNESS	B AND S GAUGE	ALUMINUM Wt. per Sq. Ft.	BRONZE Wt. per Sq. Ft.	U.S. STAND. GAUGE	STAINLESS STEEL Wt. per Sq. Ft.
.018	25	.253	.818	26	.788
.025	22	.361	1.14	24	1.05
.032	20	.456	1.46	22	1.31
.040	18	.575	1.82	20	1.80
.050	16	.724	2.27	18	2.10
.062	14	.891	2.82	16	2.62
.078	12	1.11	3.56	14	3.28
.093	10	1.34	4.23	13	3.94
.125	8	1.78	5.69	11	5.25

DRILL SIZES

STANDARD MACHINE SCREWS

SIZE	FOR SCREW CLEARANCE	WHEN HOLES ARE TO BE TAPPED	TAPS
4-40	31	43	4-40
6-32	27	36	6-32
8-32	17	29	8-32
10-32	9	21	10-32

DRILL SIZES

LEAD HOLES FOR WOOD SCREWS

SIZE	DRILL SIZE SOFT WOOD	DRILL SIZE HARD WOOD
4	48	43
6	41	35
8	33	30
10	29	24

DRILL SIZES

SELF-TAPPING SCREWS

<table>
<tr><th rowspan="2">SCREW</th><th rowspan="2">FOR SCREW CLEARANCE</th><th colspan="10">FOR TAPPING</th></tr>
<tr><th colspan="2">.032</th><th colspan="2">.050</th><th colspan="2">.062</th><th colspan="2">.093</th><th colspan="2">.125</th></tr>
<tr><td>No. 4 — PS-54 "A" Type</td><td>31</td><td colspan="2">42</td><td colspan="2">40</td><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td></tr>
<tr><td>No. 6 — PS-92 "F" Type</td><td>26</td><td colspan="2"></td><td colspan="2">34</td><td colspan="2">33</td><td colspan="2">31</td><td colspan="2">31</td></tr>
<tr><td>No. 8 — "F" Type</td><td>17</td><td colspan="2"></td><td colspan="2">28</td><td colspan="2">27</td><td colspan="2">26</td><td colspan="2">26</td></tr>
<tr><td>No. 10 — PS-48 "F" Type</td><td>8</td><td colspan="2"></td><td colspan="2">21</td><td colspan="2">20</td><td colspan="2">18</td><td colspan="2">18</td></tr>
<tr><td rowspan="2">No. 10 — PS-85 "Z" Type</td><td rowspan="2">8</td><td>AL.</td><td>STL.</td><td>AL.</td><td>STL.</td><td>AL.</td><td>STL.</td><td>AL.</td><td>STL.</td><td>AL.</td><td>STL.</td></tr>
<tr><td></td><td>27</td><td>27</td><td>24</td><td>27</td><td>24</td><td>26</td><td>20</td><td>23</td><td>18</td></tr>
</table>

MAXIMUM GLASS SIZES**

OF VARIOUS THICKNESSES FOR GLAZING

VERTICAL WINDOWS

SUPPORTED ON FOUR SIDES

SQUARE FEET OF AREA

Glass Thickness	†† SS-.087″	†† DS-.118″	1/8″	3/16″	1/4″	5/16″	3/8″	1/2″	5/8″ up to 1″	1-1/4″
30 Mile Wind	35 sq. ft.†	64.5†	72†	162	*198	*198				
40 Mile Wind	17.5†	32.25†	36†	81	144	*198	*240			
55 Mile Wind	11.6	21.5†	24†	54	96	150	216			
65 Mile Wind	8.7	16.1†	18†	41	72	112	162	*240		
80 Mile Wind	5.8	10.85	12	27	48	75	108	192		
100 Mile Wind	3.5	6.45	7	16	29	45	65	115		
120 Mile Wind	2.5	4.6	5	11	20	32	46	82	*80	*74

†"SS," "DS" and 1/8″ glass, because of flexibility, should never be used in areas exceeding 12 square feet, and for the sake of appearance, areas used should not exceed 7 square feet.

*Maximum Size Available.

**These sizes are based on practical experience and are entirely adequate. They should not be referred to the Chart of Safe Loads for Plate Glass since in actual use, due to intermittent loading, the actual factor of Safety is several times the apparent values.

††"SS" means Single Strength; "DS" means Double Strength; both apply to Window Glass.

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